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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Ex Parte

November 19, 1997

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
Mail Stop Code 1170  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

RE: CC Docket No. 95-116

On November 18, 1997, Gary Fleming, Delbert Duncan, John Scarborough and the undersigned representing SBC met with Carol Matthey and Kyle Dixon representing the Policy and Planning Division of the Common Carrier Bureau to discuss issues in the above referenced docket. The purpose of the meeting was to update the Policy and Planning Division representatives regarding the current status of long term number portability deployment in the states served by Southwestern Bell Telephone and Pacific Bell. The attached document details the discussion.

Please include this letter and the attachments in the record of these proceedings in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Acknowledgment and date of receipt of this transmittal are requested. A duplicate transmittal letter is attached concerning this matter.

Respectfully submitted,

A handwritten signature in cursive script that reads "Link Brown".

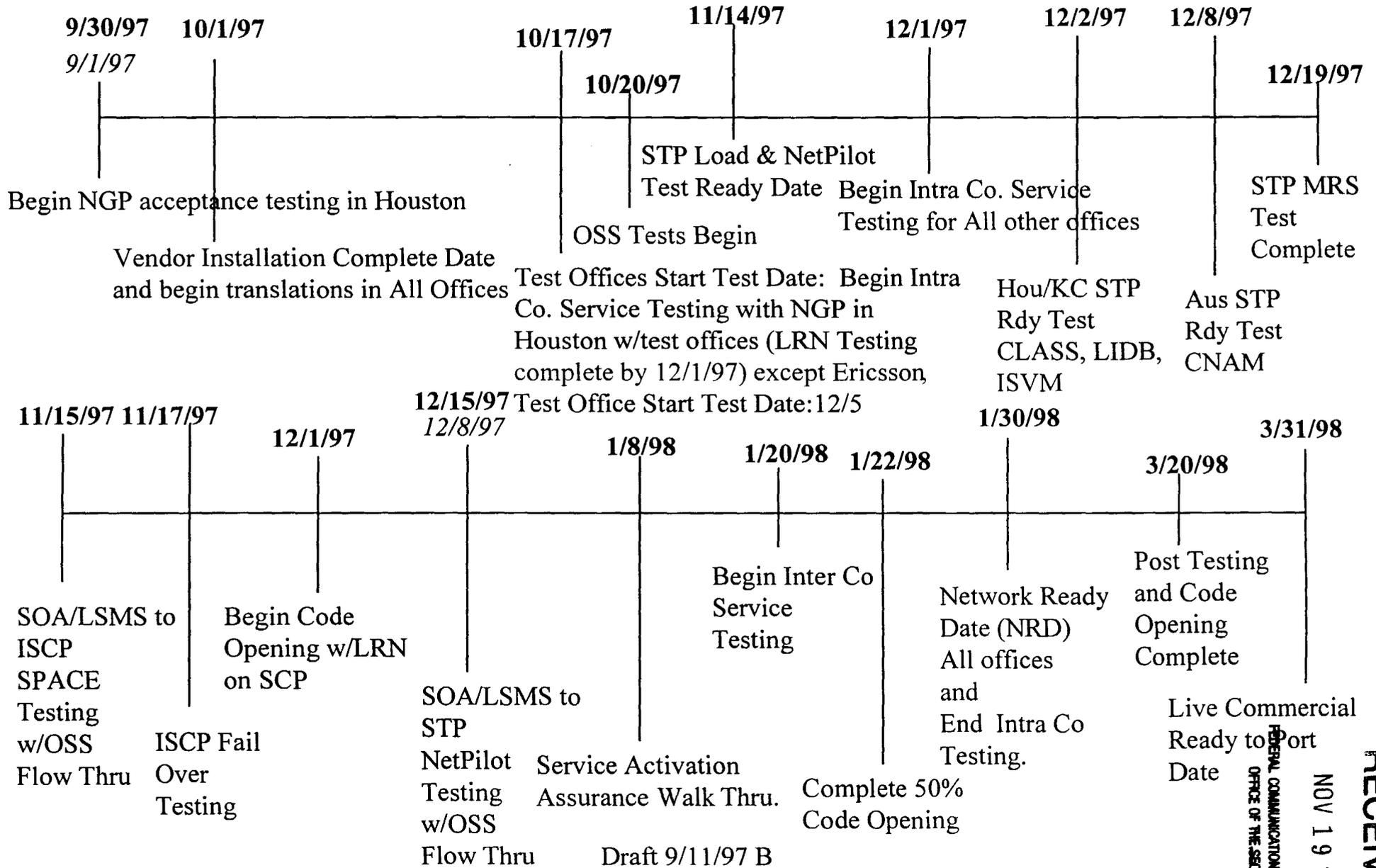
Attachments

cc: Carol Matthey  
Kyle Dixon

No. of Copies rec'd 042  
List A B C D E

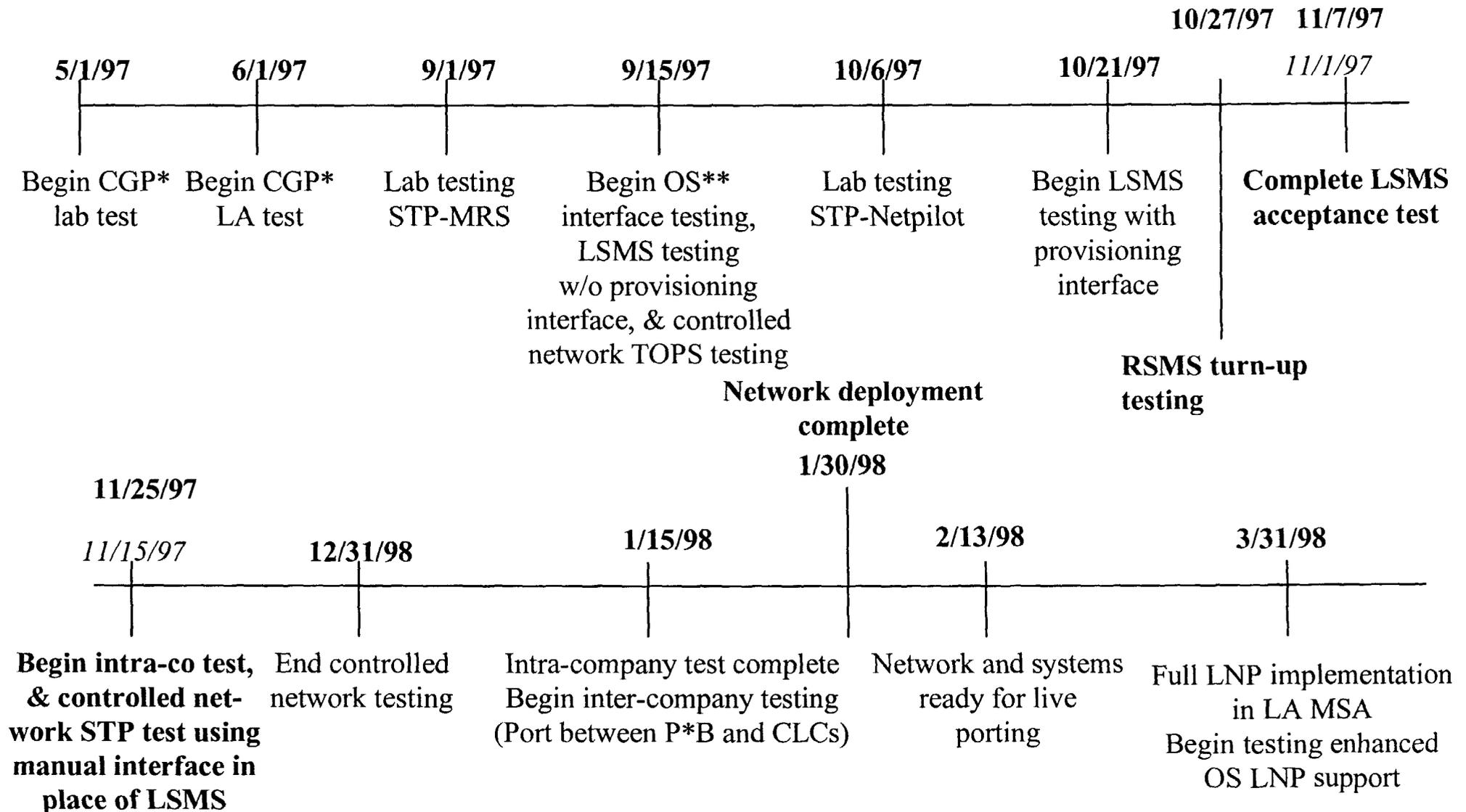
**Houston  
MSA Test**

# LNP Test Timeline 3/31/98



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# LA LNP Test Timeline

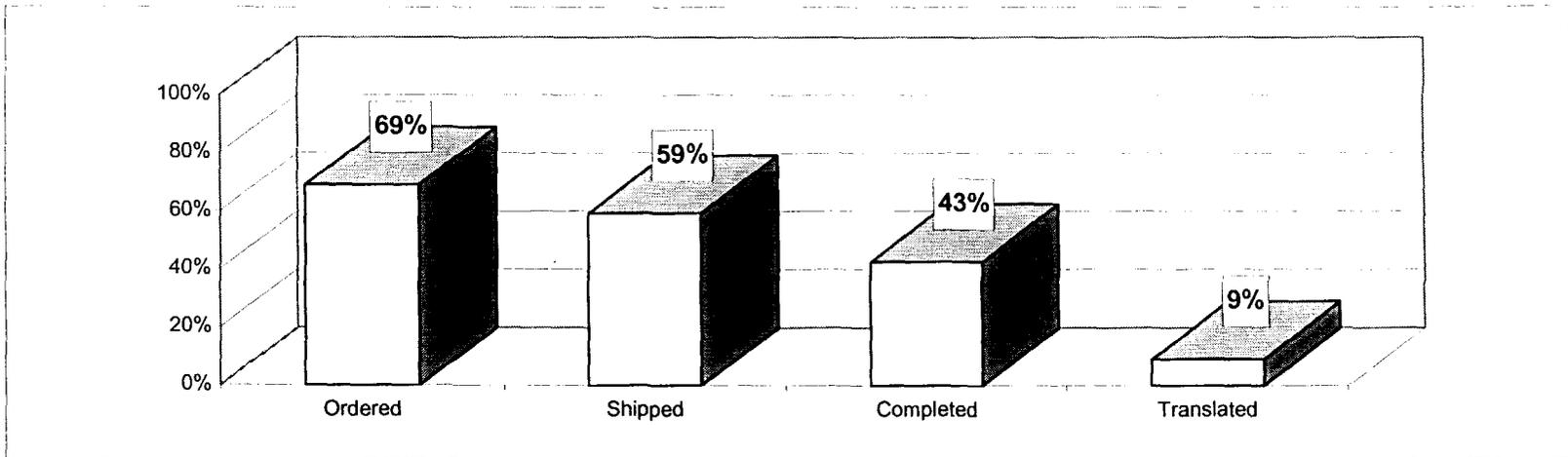


\*CGP = Current Generation Platform STP

\*\*OS = Ordering & Provisioning Systems

## SWBT LNP Status

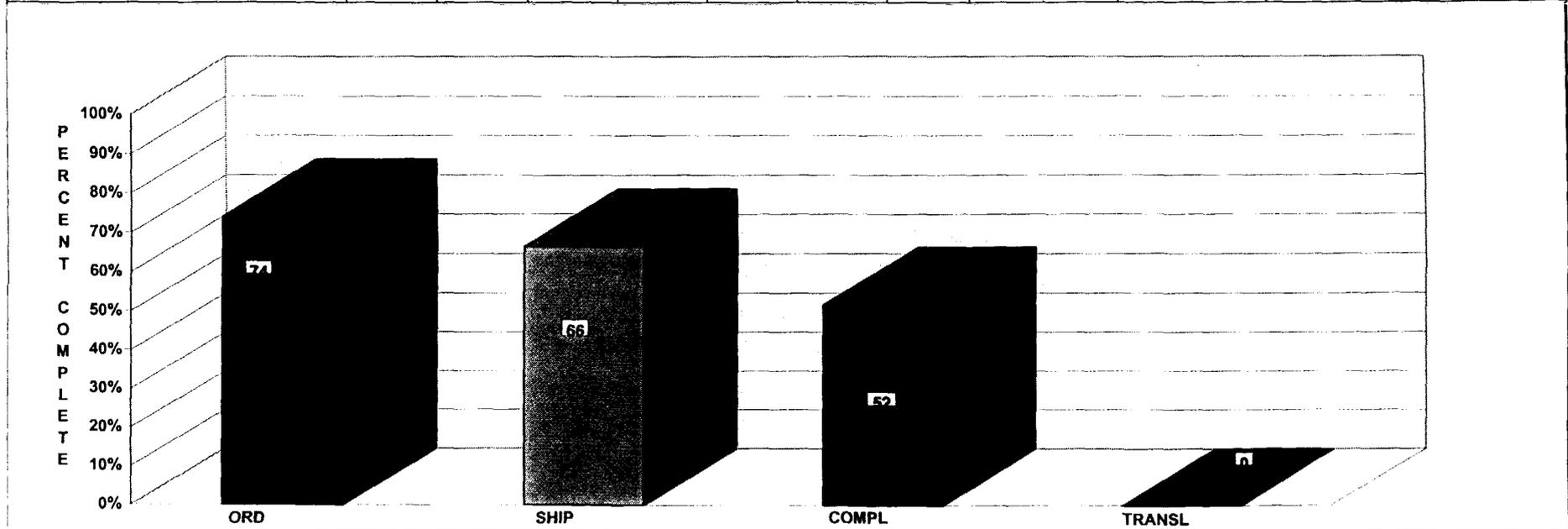
MSA	Ready to Port Date	Network Ready Date	Switch Type						Num of Sw in MSA	Jobs Ordered		Jobs Shipped		Vendor Complete		Trans Complete	
			1A	5E	D1	AXT	4E	D2		Num	%	Num	%	Num	%	Num	%
Houston	3/31/98	12/1/97	35	17	7	3	0	4	66	66	100%	63	95%	63	95%	31	47%
Dallas	5/15/98	1/15/98	13	26	6	2	1	1	49	48	98%	42	86%	32	65%		
St Louis	5/15/98	1/15/98	16	11	7	0	0	2	36	35	97%	31	86%	18	50%		
Fort Worth	6/30/98	2/13/98	13	9	10	0	0	2	34	28	82%	22	65%	19	56%		
Kansas City	6/30/98	2/13/98	8	17	7	0	0	3	35	35	100%	31	89%	6	17%		
Austin	9/30/98	6/15/98	3	8	7	3	0	2	23	4	17%	3	13%	2	9%		
Memphis	9/30/98	6/15/98	0	0	1	0	0	1	2	0	0%	0	0%	0	0%		
Oklahoma City	9/30/98	6/15/98	10	5	5	0	0	2	22	9	41%	2	9%	0	0%		
San Antonio	9/30/98	6/15/98	10	3	10	0	0	2	25	5	20%	5	20%	3	12%		
El Paso	12/31/98	8/14/98	3	4	3	0	0	0	10	0	0%	0	0%	0	0%		
Little Rock	12/31/98	8/14/98	0	7	4	0	0	1	12	0	0%	0	0%	0	0%		
Tulsa	12/31/98	8/14/98	1	1	6	1	0	2	11	2	18%	0	0%	0	0%		
Wichita	12/31/98	8/14/98	2	1	9	1	0	3	16	3	19%	3	19%	2	13%		
<b>SWBT LNP</b>			<b>114</b>	<b>109</b>	<b>82</b>	<b>10</b>	<b>1</b>	<b>25</b>	<b>341</b>	<b>235</b>	<b>69%</b>	<b>202</b>	<b>59%</b>	<b>145</b>	<b>43%</b>	<b>31</b>	<b>9%</b>



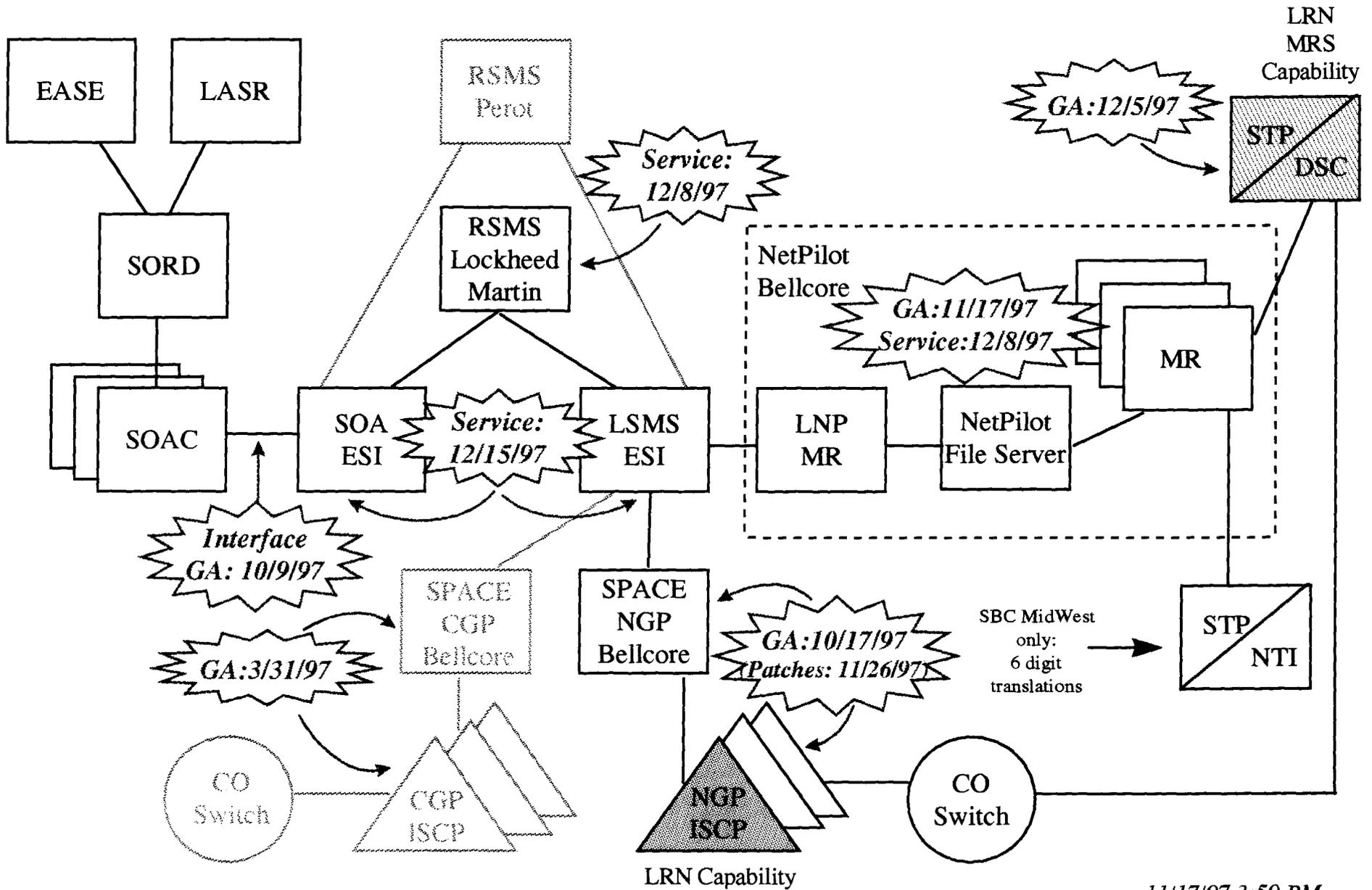
Pacific Bell LNP Status

Data Date 11/04/97

	Ready To Port	Switch Ready	Switch Type						Total per Phase	Jobs Ordered		Job Shipped		Vendor Complete		Translation Complete	
			DMS100	5ESS	1AESS	4ESS	DMS200/AT	DMS200 AT/TOPS		Num	Pct.	Num	Pct.	Num	Pct.	Num	Pct.
<b>Phase 1</b>	13-Feb-98																
Los Angeles	31-Mar-98	1-Dec-97	45	28	17	4	1		95	95	100%	95	100%	92	97%		
<b>Phase 2</b>	10-Apr-98	15-Jan-98															
Riverside	Through	15-Jan-98	6	4	2	1			13	13	100%	13	100%	11	85%		
San Diego	15-May-98	15-Jan-98	22	20	4		1		47	45	96%	44	94%	39	83%		
<b>Phase 3</b>																	
Orange County	28-Apr-98	13-Feb-98	13	21	6				40	35	88%	32	80%	25	63%		
San Francisco	Through	13-Feb-98	24	8	5	1		1	39	33	85%	30	77%	24	62%		
Oakland	30-Jun-98	13-Feb-98	26	11	8	1		1	47	39	83%	33	70%	25	53%		
<b>Phase 4</b>																	
San Jose	30-Sep-98	15-Jun-98	4	18	4	1			27	14	52%	11	41%	6	22%		
Sacramento	30-Sep-98	15-Jun-98	7	18			1		26	14	54%	11	42%	5	19%		
Fresno	30-Sep-98	15-Jun-98	1	8				1	10	6	60%	4	40%	1	10%		
<b>Phase 5</b>																	
Ventura	31-Dec-98	14-Aug-98	7	1					8	8	100%	6	75%	1	13%		
Bakersfield	31-Dec-98	14-Aug-98	3	7				1	11	5	45%	3	27%	2	18%		
Stockton	31-Dec-98	14-Aug-98	3	5				1	9	3	33%	0	0%	0	0%		
Vallejo	31-Dec-98	14-Aug-98	6	2					8	3	38%	3	38%	0	0%		
<b>Other</b>																	
Chico	1999	1999	1	3					4	2	50%	1	25%	0	0%		
Merced	1999	1999		3					3	0	0%	0	0%	0	0%		
Modesto	1999	1999		5					5	3	60%	1	20%	0	0%		
Redding	1999	1999		5					5	5	100%	4	80%	0	0%		
Salinas	1999	1999	1	7					8	3	38%	2	25%	0	0%		
San Luis Obispo	1999	1999	3	3					6	2	33%	2	33%	0	0%		
Santa Rosa	1999	1999	19						19	0	0%	0	0%	0	0%		
Santa Cruz	1999	1999		5					5	3	60%	2	40%	0	0%		
Visalia	1999	1999	7						7	0	0%	0	0%	0	0%		
Yuba	1999	1999	5						5	0	0%	0	0%	0	0%		
<b>Total P*B</b>			203	182	46	8	3	5	447	331	74%	297	66%	231	52%	0	0%



# LNP PROVISIONING - FUNCTIONAL DIAGRAM



Pac Bell Components are shown in Yellow

11/17/97 3:59 PM

# Supplier Issues

## Slippages

- DSC:
  - Message Relay Service feature delayed.
  - Netpilot interface delayed.
  - General Availability delayed.
  - Automatic Code Gapping feature not available.
- ESI:
  - LSMS Acceptance Testing delayed.
- Perot:
  - NPAC/SMS Turn-up Testing delayed.
- Lucent:
  - 5ESS translations in a live environment causing service problems.
- Nortel:
  - SN70 processor service problems.

# Supplier Issues

## Previous Concerns

- Bellcore
  - ISCP Next Generation Platform delayed.
  - ISCP/Nortel TOPS switch not compatible.
- Nortel:
  - DMS 100/200 XA Core processor delayed.
- Ericsson:
  - Next generation processor delayed.
- Perot:
  - NPAC/SMS availability
- Houston Tandem exhaust

# Supplier Slippages

## DSC: Generic Release 10

- Message Relay Service feature (CLASS and Calling Card Validation query routing)  
[June 30, 1997 to August 29, 1997]
- Netpilot OSS interface  
[August 29, 1997 to October 6, 1997]
- General Availability delayed  
[October 31, 1997 to December 5, 1997]
- Automatic Code Gapping Feature  
[First Verification Office, March, 1998; General Availability June, 1998]

The Message Relay Service functionality is required for correct routing of SS7 messages for services such as CLASS and LIDB. The Netpilot Interface provides a link for provisioning LNP data required for Message Relay Service. The schedule changes for these elements have delayed testing the Message Relay Service functionality and its impact on existing services; and delayed the schedule for internal integrated testing. This will result in a compressed internal testing schedule and/or a delayed start for external inter-company testing.

# Supplier Slippages

## DSC: Generic Release 10 continued

Southwestern Bell Telephone has been able to absorb these delays without slippage of the "ready to port " date of March 31, 1998 through compression of the testing intervals. However, these delays have required Pacific Bell to slip their scheduled porting date by four weeks from January 15, 1998 to February 13, 1998. Any further delays in availability of these elements will be evaluated and may affect the scheduled porting dates.

The delay in general availability of Release 10 results in compressed internal testing schedules and/or delayed starts for external inter-company testing. Simply stated, this adds another constraint into an already complex testing program.

Because Generic Release 10 lacks the Network Management Automatic Code Gapping (ACG) feature, DSC has developed an interim solution that will provide congestion reports and the capability for 10-digit manual intervention. The interim solution does not provide for automatic congestion controls. The interim solution is scheduled for testing at DSC in December and FVO in January, 1998. Full ACG functionality is scheduled for Release 11 with FVO in March, 1998 and GA in June, 1998. The major concern with the lack of adequate automatic network management controls is network reliability during a general or a focused overload condition.

# Supplier Slippages

## ESI Local Service Management System (LSMS) Acceptance Testing

- ESI Acceptance Testing (ESAT) was to complete 11/7/97 per contract with ESI. Slip in ESAT completion to 12/24/97.

ESI Acceptance Testing was due to complete on 11/7/97 with the resolution of severity level 1 and 2 errors by that date. ESAT results have uncovered more than 20 severity two ESAT problems for Pacific and Southwestern, and additional severity two level errors have been discovered in separate functionality tests. ESI has responded that the majority of the ESAT severity two problems will be resolved in releases planned for 11/26 and 12/10, with remaining severity two problems fixed in a 12/24 release. ESAT will complete by 12/24 if no further errors are found. As the Local Service Management System is the heart of LNP systems and network processes, this slip could result in a significant delay in end-to-end testing, industry co-operative testing, and commercial introduction of LNP. In the meantime, end-to-end testing will begin on 11/25/97 with manual work-arounds in place of a fully-functioning LSMS (representing a delay of 11 days as we develop manual processes).

This band-aid, manual work around, involves replacing the LSMS with manual interfaces to the NPAC in provisioning and order entry processes (upload) as well as service activation and number manager processes (download).

# Supplier Slippages

## Perot Number Portability Administration Center/Service Management System (NPAC/SMS)

- Perot Phase 1 “Turn-up” testing was to complete 11/10/97 with all severity 1 and 2 errors resolved prior to moving into Phase 2. Severity 2 errors remain as of 11/10/97.

Phase 1 turn-up testing has been delayed by one day for the first test group (MCI and US West) to allow Perot and Nortel to develop work-arounds for severity two problems uncovered in phase one and to conclude phase 2 product validation testing. A total of eight severity 2 problem reports remain for phase 1 (a/o 11/12). While industry service providers have concurred to move forward with these work-arounds in place, Perot will be officially notified of their missed contractual performance milestones. Pacific is a participant in the second test group (following MCI and US West), and it is possible that additional problems may be found which drive schedule slips or work-around patches that will require time consuming regression testing.

# Supplier Slippages

## Lucent 5E Translations

- Another RBOC is finding significant problems in implementing LNP with 5Es in a live network environment which is causing a slip in Pacific Bell 5E deployment that was scheduled to begin 11/11/97.

The other RBOC continues to experience translations problems when activating LNP in 5E switches. Lucent is releasing fixes as problems are discovered. Pacific Bell is assessing the impact to their network and will not deploy LNP in 5E switches until the problems are resolved or the impact assessment is acceptable.

# Supplier Slippages

## Nortel SN70 processor reliability

- Hardware/software problems on the SN70 processor causing suspension in processor upgrades.

Pacific Bell is experiencing circuit pack failures on the Nortel SN70 processor. In some instances, the switches have not been able to recover from the failure and have executed a cold restart. Analysis of the data after the failure has indicated a timing problem between redundant processors. Nortel is developing a software patch that will be trialed November 22. Given success of the trial, the patch will be made available in two weeks.

As a result, Pacific Bell has halted all SN70 processor upgrades until this problem is resolved. This delay inhibits our ability to move forward with a complete network soak. In addition, since offices requiring a SN70 processor are generally large volume offices, we are unable to determine if we've adequately engineered the switch.

# Previous Concerns

## Bellcore ISCP NGP Availability

- NGP Release 5.1  
[August 31, 1997 GA to September 19, 1997 GA, additional patches September 30, 1997]

Due to SS7 conformance problems with the new front end processor in the NGP, the 5.1 software release has been slipped to September 19, 1997. There is the potential that additional patches will be required. These patches would be available September 30, 1997. If these patches are extensive, we will wait for the patches before loading 5.1. This produces an estimated 30 day slip in availability. Southwestern Bell is reviewing the timeline activities to determine how this slip can be absorbed.

# Previous Concerns

## Alliance ( Bellcore) ISCP/ Nortel TOPS

- TOPS VO Release LNP query format omits optional SS7 parameter. ISCP errors out query without this parameter.

Both Bellcore and Nortel were notified of this problem and requested to provide a fix. Nortel responded that a fix could not be provided until the NA010 release (December 1998). Bellcore has responded by providing a fix for this problem with new software.

The NGP 5.1 Release will contain the corrected software. The fix for the CGP software has been sent in a patch and is currently being tested in Pacific Bell. This problem delayed the start date for operator services testing in Southwestern Bell Telephone from August 1, 1997 to September 15, 1997, and reduced the time available for testing and problem resolution. Also, especially for Pacific Bell, requiring a software change on the CGP platform has created resource and schedule problems in the labs where additional soak and regression testing are required.

For Southwestern Bell, the software fix on the NGP has been successfully tested in the lab.

# Previous Concerns

## Nortel: XA Core Availability

- Next generation processor (XA Core)  
[ August, 1998 GA to June, 1999 GA ]

Southwestern Bell and Pacific Bell have several end office and tandem switches that will approach or reach processor exhaust when LNP is implemented. The original plan was to upgrade to the XA Core processor when it was available. SBC was promised at least one VO slot (available several months before the original GA date) to help with critical switches. The delay in XA Core availability has triggered significant changes to our network plans.

- An additional tandem switch will be installed in Houston on an expedited basis. The planning study for this additional tandem would have been done later this year with installation, if necessary, in the 1998/1999 timeframe.
- Until the new tandem is available (3Q98), traffic coming into the Houston 0801T switch will not have an LNP query performed, but will be default routed to the donor end office. This will impact call set up time and, in some instances, could impact transmission quality.
- End offices projected to exhaust due to LNP query processing will only perform LNP queries on their native NXXs. All other outgoing traffic will default route.
- Nortel has committed to a Capacity Enhancement Program to extend the life of the existing SN 70 processor. This program provides for real time processor efficiencies in the next three generic releases.
- If projected LNP related processor utilization estimates are exceeded, planned processor efficiencies are not achieved on schedule, or the XA Core availability is further delayed, additional switches may require query reduction and additional default routing will occur.

## Previous Concerns

### Ericsson: Next generation processor (APZ 212-11 to APZ 212-20)

- Ericsson APZ 212-20 originally required for LNP on AXE 10 switches [October, 1997 to 1998]

Southwestern Bell Telephone has Ericsson switches throughout the network, including our first MSA implementation in Houston. LNP implementation included upgrading from the APZ 212-11 processor to the APZ 212-20 processor, based on information from Ericsson. Ericsson will now support the LNP software on their current processor, the APZ 212-11, in 4Q97. Due to delayed availability of the 212-20 processor, they have changed their direction from initial testing on the 212-20 to start testing on the 212-11. Ericsson is conducting processor studies on the largest Southwestern Bell Telephone switches using projected LNP query loads. Their initial study on our largest switch shows adequate processor capacity utilizing the current 212-11. Southwestern Bell will proceed with deploying LNP on the current processors, and processor upgrades will be handled as required under baseline growth.

If the 212-11 processors can handle the LNP query load (contrary to initial Ericsson projections), the delay in availability of the 212-20 processor will not affect our implementation. Should the 212-11 processor exhaust with LNP implementation, queries will be limited and traffic will be default routed.

# Previous Concerns

## Perot: Number Portability Administration Center/Service Management System (NPAC/SMS)

- Delay expected on availability of commercial production system  
[October 1, 1997 to December, 1997]

The NPAC/SMS is a service provided by Perot which includes developing, maintaining, administering and operating a number portability administration center and service management system. The service centers around a regional database that receives, records, houses and distributes information on ported numbers so carriers can correctly route calls. Perot is the vendor of the NPAC/SMS for the South East, Western, and West Coast regions. Pacific Bell is a member of the West Coast portability region and must rely on Perot's service to provide LNP.

It has become apparent that Perot will be unable to meet the original master contract performance date for a 10/1/97 delivery of the commercial production system. Negotiations between Perot and the three regions that are served by Perot started on 9/10/97 and are scheduled to conclude by 9/19/97. Negotiations indicate that the delivery of the commercial production system will likely move to a December, 1997 date.

Initial assessments by Pacific Bell conclude that this change in delivery date can be managed within the current Pacific Bell schedules for LNP testing and service delivery. However, if additional delays are experienced, significant impacts to testing and production deliverables will occur.

# Previous Concerns

## Houston Tandem Exhaust

- Discussed Nortel tandem capacity issue at previous Ex Parte meeting (July 14, 1997).
- One of the four tandems will exhaust with LNP.
- Have implemented a relief plan.
- Relief is not available until September, 1998.
- Traffic to affected tandem will default route to donor switch until relief is available.
- Potential impacts:
  - Call set-up time
  - Transmission quality

# Summary

- Implementation is on target to meet FCC schedule.
- Supplier slippages have occurred, but we have been able to deal with them by working with suppliers, developing manual work-arounds and compressing testing schedules.
- There is very little, if any, tolerance for further slippage.