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January 16, 2004

Honorable Deborah Taylor Tate, Chairman
Tennessee Regulatory Authority
460 James Robertson Parkway
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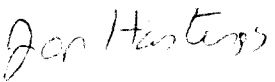
In Re: Implementation of the Federal Communications Commission's Triennial
Review Order (Nine-month Proceeding) (Switching)
Docket No. 03-00491

Dear Chairman Tate:

Enclosed please find a CD-Rom and five (5) copies of Sherry Lichtenberg's testimony filed on behalf of MCImetro Access Transmission Services, Inc. and Brooks Fiber Communications of Tennessee, Inc. (collectively "MCI"). Copies has been served on all parties of record.

Very truly yours,

BOULT, CUMMINGS, CONNERS & BERRY, PLC

By: 
Jon E. Hastings

JEH/th

Enclosures



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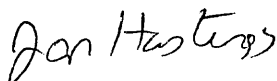
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CERTIFICATE OF SERVICE

I hereby certify that on January 16, 2004 a copy of the foregoing document was served on the parties of record, via electronically, US mail or hand delivery:

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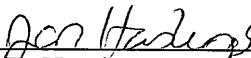
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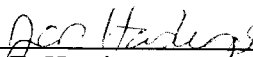
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Jon E. Hastings

**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

IN RE:

Implementation of the Federal)	
Communication's Commission's)	DOCKET NO.
Triennial Review Order – 9 MONTH)	03-00491
PROCEEDING – SWITCHING)	

DIRECT TESTIMONY OF SHERRY LICHTENBERG

On Behalf Of

MCIMETRO ACCESS TRANSMISSION SERVICES, LLC

And

BROOKS FIBER COMMUNICATIONS OF TENNESSEE, INC.

January 16, 2004

1 **Q. PLEASE STATE YOUR NAME, EMPLOYER AND TITLE.**

2 A. My name is Sherry Lichtenberg. I am currently employed by MCI as Senior
3 Manager, Operational Support Systems Interfaces and Facilities Development.

4 **Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.**

5 A. I have twenty-two years of experience in the telecommunications market, fifteen
6 years with AT&T and seven with MCI. I joined MCI in 1996 as a member of the
7 initial team responsible for the development of MCI's local services products,
8 both UNE-P and facilities-based. Prior to joining MCI, I held a number of
9 positions at AT&T, including working in the General Departments organization,
10 where I developed methods and procedures and billing and ordering systems for
11 use by the Bell Operating Companies and later American Bell. I was Pricing and
12 Proposals Director for AT&T Government Markets, and Executive Assistant to
13 the President and Staff Director for AT&T Government Markets. I also held a
14 number of positions in Product and Project Management. My current role with
15 MCI includes designing, managing, and implementing MCI's local
16 telecommunications services to residential and small business customers on a
17 mass-market basis nationwide. I support both UNE-P product development and
18 our testing and planning for facilities based competition via UNE-L. I have
19 testified in numerous proceedings before the FCC and state public service
20 commissions including multiple state 271 proceedings, network modernization
21 proceedings and a variety of DSL proceedings. In addition, I have worked with
22 the MCI carrier management and contracts teams to negotiate our interconnection
23 agreements with the incumbents.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
2 **PROCEEDING?**

3 A. The purpose of my testimony is to address operational barriers to the deployment
4 of mass markets UNE-loops. The discussion of operational barriers falls into two
5 categories: network operational issues and customer impacting operational issues.
6 My testimony addresses the customer impacting operational issues, while MCI's
7 network operational testimony discusses the network barriers that exist today.

8 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

9 A. After much work to develop interfaces and conquer operational problems, MCI
10 launched residential local service in Tennessee in 2002 and now provides local
11 service to tens of thousands of Tennessee consumers via UNE-P, the only service
12 delivery method that has proved successful thus far in bringing local service to the
13 mass market. MCI is now evaluating a move to a UNE-L service delivery method
14 when and where it is economically and operationally feasible, because MCI
15 would prefer to serve these customers whenever possible over its own facilities
16 and because it wants to provide voice and DSL service using the same network.
17 Today, installing a customer on UNE-L in mass markets volumes and
18 transitioning from UNE-P to UNE-L are complicated and difficult processes, in
19 large part because of the customer impacting operational problems that I discuss
20 below. Such problems must be understood and resolved in the context of today's
21 multi-carrier market, both with respect to customer expectations and developing
22 competition among carriers.

1 Today's customers have experienced relatively seamless migrations among long
2 distance carriers, and increasingly among local carriers as well. They will judge
3 their experience with UNE-L carriers by the same standards, and thus so should
4 the Authority. Today's competitive landscape involves a number of carriers with
5 significant consumer customer bases, so it is no longer sufficient just to consider
6 whether BellSouth can effect a customer's initial migration from UNE-P to that
7 same CLEC using UNE-L. Now the entire industry must be taken into account,
8 because it is just as important that subsequent migrations from one CLEC to
9 another be transparent to the customer. Unlike the 271 process, where the
10 primary issue was BellSouth's ability to provide competitive carriers access to the
11 systems and processes necessary to migrate customers from retail to wholesale
12 services, this proceeding concerns whether customers can move freely among all
13 carriers regardless of service delivery method. Competition cannot flourish
14 unless customers can do so.

15 In this context, the operational issues I discuss below are critical. Those
16 issues involve the extensive manual ordering and provisioning processes and
17 multi-carrier coordination currently required for UNE-L migration, as well as the
18 exchange of information concerning the databases for customer service records
19 ("CSRs"), the Local Facilities Administration and Control System ("LFACS"),
20 E911, the National Number Portability Administration Center ("NPAC"), the
21 Line Information Database ("LIDB"), the Caller Name Database ("CNAM"),
22 Directory Listing/Directory Assistance ("DL/DA"), and printed directories. I
23 also will discuss issues that must be addressed with respect to trouble handling.

1 In addition to outlining these issues, I also have suggested approaches to
2 addressing them, which should at least provide a starting point for resolution.
3 Additional issues are certain to arise as MCI and other carriers gain experience
4 with UNE-L, and thus the Authority will need to play a continuing role to ensure
5 that all operational barriers to UNE-L implementation are addressed and resolved.

6 Moving existing customers from UNE-P to UNE-L (the batch hot cut
7 process described by the FCC) is only one small piece of the new processes that
8 will be required to maintain the level of competition in Tennessee in a facilities-
9 based world. Even if customers who are already served by a CLEC can be
10 transitioned to a new carrier using a batch hot cut process – what then? How will
11 customers continue to be able to migrate among other carriers as they do today
12 with UNE-P?

13 Rolling access, whereby customers were acquired via UNE-P and then
14 transitioned to UNE-L using batch hot cuts, would not solve these operational
15 problems either. Rolling access would only address the initial migration from
16 BellSouth to a CLEC, and not subsequent migrations between carriers. Moreover,
17 rolling access would not address the operational issues I discuss below; indeed, it
18 might exacerbate such problems, since these customers must first be provisioned
19 on one service – and receive and activate one set of features – and then be
20 provisioned on another, with potentially different features and the need to activate
21 them once again. In the final analysis, there is no “silver bullet” that will solve all
22 the operational problems involved in rolling out UNE-L to the mass market and
23 particularly residential customers. As with UNE-P, these problems will have to

1 be solved one at a time with the Authority's oversight and with the active
2 involvement of all industry players.

3 In short, numerous customer impacting operational barriers currently
4 render CLEC entry via UNE-L uneconomic throughout Tennessee, and the
5 Authority should so find. Upon reaching this conclusion (if not beforehand), the
6 Authority should work with the industry to address that impairment so that the
7 operational barriers that currently exist may be removed.

8 **MCI's Tennessee Local Mass Market Service**

9 **Q. WHY IS IT IMPORTANT FOR THE AUTHORITY TO CONSIDER**
10 **CLECS' EXPERIENCE IN ENTERING THE TENNESSEE LOCAL**
11 **CONSUMER MARKET?**

12 A. A review of CLECs' experience to date with UNE-P should provide the Authority
13 with a general understanding of the kinds of obstacles that must be overcome in
14 developing and implementing a new service delivery method. And consideration
15 of CLECs' fledgling efforts to implement UNE-L will provide insight into the
16 real-world operational challenges that CLECs face when attempting to serve the
17 mass market with their own switches. Further, CLECs' efforts to enter the
18 Tennessee local consumer market shed light on what consumers have come to
19 expect when they migrate from one local service provider to another.
20 Understanding those consumer expectations is a key part of recognizing and
21 addressing operational problems.

22 **Q. WHAT IS THE DIFFERENCE BETWEEN UNE-P AND UNE-L?**

1 A. UNE-P involves the leasing of the piece parts of BellSouth's network on an end-
2 to-end basis. When a customer is migrated from BellSouth to a UNE-P CLEC, no
3 changes are made to the physical facilities used to serve the customer. To date,
4 UNE-P has been the only service delivery method that has enabled CLECs to
5 serve residential and small business customers on a broad scale and will continue
6 be the only way to provide such service for some time.

7 In contrast, UNE-L involves leasing the customer's loop, terminating that
8 loop to a CLEC's collocation space in BellSouth's central office (assuming the
9 CLEC has such a space), and transporting calls to the CLEC's switch from which
10 the customer draws dial tone and receives local service. Migrating a customer
11 from BellSouth today to a UNE-L CLEC requires the customer's loop to be "cut
12 over" from the BellSouth switch to the CLEC's collocation equipment while the
13 customer's service is still "live," thus giving rise to the term "hot cut." Hot cuts
14 are required in all UNE-L scenarios, including when a CLEC migrates its own or
15 another CLEC's UNE-P customer to UNE-L, or when a UNE-L customer moves
16 from one CLEC to another, or even when a CLEC UNE-L customer is won back
17 to BellSouth. Many steps in the cutover process are manual, which inevitably
18 leads to customer outages and other problems that occur only rarely with UNE-P
19 migrations. In addition, carriers must exchange critical information with each
20 other and third parties (for example the local number portability transaction), but
21 the processes for doing so are far from seamless.

22 **Q. PLEASE DESCRIBE THE PROCESS THAT LED TO MCI'S LAUNCH OF**
23 **LOCAL MASS MARKET SERVICE IN TENNESSEE.**

1 A. That process was a long one, beginning with the passage of the
2 Telecommunications Act of 1996 (“Act”). Although the Act required BellSouth
3 to unbundle its network, a number of battles had to be fought before MCI could
4 launch its local consumer service in Tennessee. First of all, CLECs had to
5 establish the right to use UNE-P, which took several years and two U.S. Supreme
6 Court decisions. Second, the industry and the Authority undertook lengthy UNE
7 pricing proceedings, in an effort to move UNE rates closer to the TELRIC
8 standard required by the FCC. Finally, major changes taking several years were
9 required to modify BellSouth’s operations support systems (“OSS”) to make it
10 feasible to order and provision service using UNE-P in the volumes required to
11 serve mass market customers.

12 UNE-L implementation will involve additional systems requirements and
13 changes, including enhanced electronic provisioning processes to allow UNE-L
14 orders to flow through BellSouth’s systems, processes to implement seamless
15 CLEC-to-CLEC migrations at high volumes, and coordination with non-ILEC
16 systems such as the NPAC and the ALI database provider to ensure that customer
17 migrations are completed in a timely and correct manner. Since outside
18 organizations such as NPAC have not had to deal with mass markets customer
19 migrations of the type seen with UNE-P, they are untested and potentially
20 unready for these changes, making the process of curing impairment all the more
21 difficult.

22 **Q. WHEN DID MCI LAUNCH ITS LOCAL CONSUMER SERVICE AND**
23 **WHAT HAS ITS EXPERIENCE BEEN?**

1 A. In April 2002 MCI launched “The Neighborhood built by MCI” in Tennessee and
2 a number of other states. Since then, MCI has expanded its local footprint and
3 now serves more than 70,000 UNE-P lines in Tennessee and more than 3.5
4 million nationally. The Neighborhood, which uses UNE-P, provides Tennessee
5 residential and small business consumers with packages of local, intraLATA and
6 interLATA voice services, along with assortments of popular features.

7 **Q. DOES MCI PLAN TO MOVE ITS LOCAL RESIDENTIAL AND SMALL**
8 **BUSINESS CUSTOMERS TO ITS OWN NETWORK?**

9 A. Yes. MCI currently is evaluating the use of UNE-L where it makes operational
10 and economic sense. Once the problems with full-scale use of UNE-L described
11 in my testimony and in MCI’s network operational testimony are corrected (and
12 the economic issues addressed in MCI’s economic testimony are addressed), we
13 can begin to make the transition from UNE-P to UNE-L. The timing and scope of
14 the deployment will of necessity be limited not only by the resolution of
15 operational and economic issues, but also by MCI’s collocation and switch
16 footprint and availability.

17 **Q. WHY DOES MCI WANT TO TRANSITION CUSTOMERS FROM UNE-P**
18 **TO UNE-L?**

19 A. There are at least two reasons. First, MCI, like any carrier, would prefer to
20 provide service using its own network as much as possible because doing so
21 would allow MCI both to use its state-of-the-art network and to promote further
22 innovation of its products and services through further development and
23 deployment of new technology. Although UNE-P has been, and remains, critical

1 to MCI being able to provide local residential and small business service in
2 Tennessee, UNE-P requires MCI to rely on its chief competitor, BellSouth, for
3 network services. To the extent it is economically and operationally viable to do
4 so, MCI would prefer to use its own network via UNE-L, to provide service to its
5 customers.

6 Second, MCI must take into account the changes taking place today in the
7 telecommunications industry. Telecommunications is gradually moving from an
8 industry controlled by large monopolies to one with multiple carriers offering
9 multiple services to a dynamic customer base. The trend in the industry is toward
10 bundled services and IP-centric offerings that enable consumers to select one
11 carrier that meets all of their communications needs. As MCI begins to roll out its
12 broadband services to consumers, it only makes sense to integrate its broadband
13 facilities with its voice facilities. Eventually, when voice over internet protocol
14 (“VoIP”) replaces traditional circuit switching as the technology of choice, it will
15 be essential that MCI move off BellSouth’s circuit switches and onto its own
16 facilities. MCI is planning for that future while serving its more than 3.5 million
17 mass markets customers today.

18 **Q. WHERE WOULD MCI POTENTIALLY BE ABLE TO PROVIDE UNE-L**
19 **SERVICE?**

20 A. UNE-L requires the CLEC to have its own switch and to be collocated in the
21 BellSouth central office where the loops of the customers it wants to serve are
22 terminated. MCI will be able to provide UNE-L service only in areas where it
23 already has deployed collocation equipment and local switches. MCI has been a

1 facilities-based local exchange carrier in the large enterprise market for a number
2 of years. MCImetro -- MCI's CLEC -- installed its first switch in 1995 and since
3 then has installed local switches, collocations in BellSouth central offices and
4 fiber rings in major metropolitan areas throughout the country, including
5 Tennessee. MCI uses these facilities (along with leased high capacity loop
6 facilities or their equivalent) to provide competitive local exchange service to
7 business customers today. Moving to UNE-L would enable MCI to take
8 advantage of those facilities. MCI will use its network wherever and whenever it
9 makes operational and economic sense to do so instead of constantly having to
10 rely on, and do battle with, BellSouth for the nondiscriminatory use and correct
11 pricing of its network. But MCI can do this for mass markets customers only
12 when it can ensure that those customers will continue to have the same seamless
13 migration experience that its UNE-P customers have today.

14 **Q. DOES MCI INTEND TO USE UNE-L EVERYWHERE IT HAS MASS-**
15 **MARKET CUSTOMERS?**

16 A. No. I can't imagine that would happen. For one thing, there are many areas and
17 even entire states where MCI does not have any facilities. And it is highly
18 unlikely that UNE-L will make economic and operational sense everywhere in
19 every state, but that is an analysis that will be discussed in detail in the economic
20 testimony being filed by MCI in this proceeding.

21 **Q. WHAT IS THE SIGNIFICANCE TO THIS CASE OF MCI'S PLANS TO**
22 **BEGIN TRANSITIONING CUSTOMERS TO UNE-L?**

1 A. MCI's review of the potential for moving to UNE-L illustrates the fundamental
2 point of the *Triennial Review Order*¹: MCI and other CLECs have every
3 incentive to serve customers over their own networks, and will do so where and
4 when it makes operational and economic sense. They do not need to be forced to
5 do so. Once the operational and economic barriers have been brought down,
6 CLECs will move freely to a UNE-L strategy, something they cannot do today.
7 The success of that transition will be the best evidence that CLECs are no longer
8 impaired without access to BellSouth switching.

9 **Q. WHAT WOULD HAPPEN IF COMPETITORS WERE REQUIRED TO**
10 **MOVE TO UNE-L TODAY?**

11 A. There would be chaos and consumers would be the ones hurt. The UNE-L
12 migration process today is manually intensive and cumbersome with multiple
13 points of failure that could result in delay, inability to receive calls and, worse yet,
14 loss of dial tone for the consumer. Customer migration problems could lead to
15 customers being "stranded" on a carrier's network, unable to move anywhere else.
16 These and other operational barriers prevent CLECs from being able to meet
17 customer expectations. Thus, if the transition to UNE-L were made prematurely,
18 the progress that has been made toward a dynamic, competitive
19 telecommunications market since the passage of the Act would be destroyed.

¹ See *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carrier*, CC Docket No. 01-338, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking FCC 03-36 (rel. Aug. 21, 2003) ("*Triennial Review Order*" or "*Order*").

1 For UNE-L to be an acceptable service delivery method, it must allow
2 competitors to meet and even exceed customers' expectations. In particular,
3 migrations between carriers using UNE-L must be seamless and the systems and
4 processes of the entire industry – BellSouth, CLECs and third parties – must be
5 fully functional and capable of working together effectively. Today these systems
6 and processes are highly manual and are untested in a mass market environment.

7 **Q. ISN'T THE TRANSITION TO UNE-L SIMPLY A MATTER OF HOT**
8 **CUTTING A LOOP FROM ONE LOCATION TO ANOTHER?**

9 A. No, moving to UNE-L is more than hot cutting loops from the BellSouth Main
10 Distributing Frame (MDF) to MCI's collocation. It includes developing the
11 processes and systems necessary to ensure that the customer's E911 service is not
12 interrupted or the data rendered inaccurate, to "port" his number to his new carrier
13 (and to a second carrier when that is requested), and to resolve problems when
14 they arise. And it requires that this transition take place without harming that
15 customer and without limiting his competitive choices.

16 **Q. HAS ANY CARRIER ATTEMPTED TO TRANSITION TO AND SERVE A**
17 **LARGE MASS MARKET RESIDENTIAL CUSTOMER BASE USING**
18 **UNE-L?**

19 A. No. No carrier has yet attempted a broad-scale facilities-based approach for
20 residential mass markets customers. Because this will be a new experience for the
21 industry, many of the problems that arise will have to be worked out for the first
22 time, which will add to the difficulty of creating workable solutions. To use
23 UNE-L, CLECs will need to interconnect their networks with BellSouth's

1 network in a much more integrated fashion than ever before. Beyond making the
2 changes I describe below that are necessary to order and support UNE-L,
3 “interconnection” in this sense also means that CLECs will need to physically
4 connect their local networks with BellSouth’s local network and switches on a
5 broad scale to get access to BellSouth’s loops to provide service to customers. It
6 also will require capacity upgrades to MCI’s and other carriers’ E911 trunks and
7 additional trunking to BellSouth’s tandem switches. For example, today a
8 significant number of calls between BellSouth and CLEC customers in the same
9 rate center are completed in BellSouth’s switch. Once customers are moved to
10 UNE-L, however, these calls will need to route to the BellSouth tandem switch to
11 be completed, potentially increasing the need for tandem switching capacity.
12 MCI’s Network Impairment testimony describes these issues in greater detail.

13 **Q. WILL THE TRANSITION TO UNE-L INVOLVE MORE THAN SIMPLY**
14 **MIGRATING MCI’S EXISTING UNE-P CUSTOMER BASE?**

15 A. Yes, definitely. The move to facilities-based competition is not simply about
16 customers moving from UNE-P to UNE-L, or even from the incumbent monopoly
17 to the CLEC. Customers also will move from one CLEC to another. Those
18 CLECs may be UNE-L CLECs, UNE-P CLECs, resellers or cable companies.
19 Today, customers return to BellSouth and migrate back and forth between UNE-P
20 and resale CLECs on a daily basis. Some customers also try to migrate from
21 facilities-based providers to UNE-P CLECs, but this process is almost completely
22 manual and far from seamless. The key point here is that MCI’s move to
23 facilities-based competition will not be limited to establishing and maintaining the

1 relationship between MCI and BellSouth; it involves the entire industry -- MCI,
2 BellSouth, and every other CLEC offering service in the state. And in reality, it
3 involves more than that. As I will discuss in greater detail later, the move to
4 facilities-based competition will have implications for third parties that provide
5 necessary but ancillary services, such as E911 providers and the LNP provider.

6 **Triennial Review Order**

7 **Q. DID THE FCC'S TRIENNIAL REVIEW ORDER RECOGNIZE THAT**
8 **THERE ARE OPERATIONAL BARRIERS TO UNE-L?**

9 A. Yes. Although I am not a lawyer, I have reviewed the *Triennial Review Order*
10 issued by the FCC with respect to the operational issues it addresses, and the FCC
11 clearly recognized that operational barriers exist to UNE-L competition today.
12 The FCC made a national finding of impairment with respect to unbundled local
13 switching at the mass market level based on the existence of these operational
14 barriers. (*Order* ¶ 419.) In essence, the FCC realized that competitors are
15 currently unable to move to a UNE-L service delivery method with the processes
16 and procedures that currently exist. Further, the FCC concluded that, for local
17 competition to exist, competitors must have access to unbundled local switching
18 until the existing operational and economic issues with UNE-L are fully
19 identified, investigated and adequately resolved.

20 **Q. DID THESE OPERATIONAL BARRIERS LEAD TO THE FCC'S**
21 **FINDING OF IMPAIRMENT WITH RESPECT TO MASS MARKET**
22 **SWITCHING?**

1 A. Yes. In the *Triennial Review Order*, the FCC explicitly recognized the complex
2 operational issues currently preventing UNE-L from being a viable local service
3 delivery method and concluded that these issues were serious enough to find
4 nationally that competitors are impaired without access to unbundled local
5 switching. (*Order* ¶¶ 419, 456.) Unlike UNE-P migrations, in which the CLEC
6 uses the same facilities as the ILEC in providing local service, UNE-L migrations
7 are complicated by the necessity of physically moving the customer’s loop to the
8 CLEC’s collocation equipment and from there routing the customer’s calls back
9 to the CLEC’s switch. In addition, more data must be exchanged between local
10 providers with UNE-L than is required with UNE-P. The FCC recognized that
11 until these operational issues involving UNE-L are addressed and adequately
12 resolved – that is, until migrations and service changes in a UNE-L environment
13 are as seamless and trouble free as they are with long-distance and UNE-P – a
14 transition to UNE-L would do nothing but harm competition and consumers.

15 The FCC concluded that the record before it evidenced a wide array of
16 operational issues that prevent UNE-L from being a realistic local service delivery
17 method at present. (*See, e.g., Order* ¶¶ 476-478.) As the FCC stated, competitive
18 carriers may face barriers associated with loop provisioning that may impair their
19 entry into the mass market. (*Order* ¶ 512.) The FCC asked the states to
20 determine whether ILECs are providing nondiscriminatory access to unbundled
21 loops. (*Order* ¶ 512.) In making this determination, the FCC requested the states
22 to consider more granular evidence concerning the ILECs’ ability to transfer
23 loops in a *timely and reliable* manner. (*Order* ¶ 512.) Accordingly, before UNE-

1 L can be an operational reality, it must be possible quickly, seamlessly and
2 reliably to transfer loops from ILEC to CLEC as well as CLEC to CLEC and
3 CLEC to ILEC – both as an operational necessity and to give customers the
4 reliable, problem-free service they demand and expect.

5 **Q. THE FCC DISCUSSED THE “HOT CUT” PROCESS AT SOME**
6 **LENGTH.**

7 A. Yes, and with good reason. The FCC noted that a “hot cut refers to a process
8 requiring incumbent LEC technicians to disconnect manually the customer’s loop,
9 which was hardwired to the incumbent LEC switch, and physically re-wire it to
10 the competitive LEC switch, while simultaneously reassigning (*i.e.*, porting) the
11 customer’s original telephone number from the incumbent LEC switch to the
12 competitive LEC switch.” (*Order* ¶ 421 n.1294.) Hot cut problems listed by the
13 FCC included “the associated non-recurring costs, the potential for disruption of
14 service to the customer, and our conclusion, as demonstrated by our record, that
15 incumbent LECs appear unable to handle the necessary volume of migrations to
16 support competitive switching in the absence of unbundled switching.” (*Order*
17 ¶ 421 n.1294.) The FCC explained that because of the manual, labor-intensive
18 nature of the hot cut process, “hot cuts frequently lead to provisioning delays and
19 service outages, and are often priced at rates that prohibit facilities-based
20 competition for the mass market.” (*Order* ¶ 465.) In other words, the FCC
21 concluded that the hot cut process posed a prohibitive barrier to UNE-L.

22 **Q. DID THE FCC DISCUSS THE IMPACT OF OPERATIONAL**
23 **IMPAIRMENT ON CUSTOMERS IN ITS ORDER?**

1 A. Yes. In addition to discussing the technical aspect of these network operational
2 issues, the FCC also explained how these operational issues negatively affect the
3 customer's experience. The FCC noted that the delay that accompanies a UNE-L
4 migration prevents competitors from providing service in a way that mass-market
5 customers have come to expect. (*Order* ¶ 466.) For example, in Tennessee a
6 BellSouth UNE-P migration takes one business day, while migrating the same
7 customer to UNE-L takes at least five business days (and much longer with
8 BellSouth's "batch transition process"), assuming BellSouth has the resources
9 necessary to perform the cutover on the requested date. A UNE-L migration
10 using today's hot cut process will always have the potential to harm a customer
11 more than a UNE-P migration, because, as the FCC noted, "[f]rom the time the
12 technician disconnects the subscribers loop until the competitor reestablishes
13 service, the subscriber is without service." (*Order* ¶ 465 n.1409.) Similarly, the
14 UNE-L process of "porting" the customer's number from the ILEC switch to the
15 CLEC switch "also potentially subjects the customer to some period of time
16 where incoming calls will not be received," because if the number is not ported
17 properly, calls will not be routed to the customer's new number on the CLEC
18 switch and the calling party will receive a message stating that the customer's
19 number is no longer in service. This problem can be particularly significant when
20 the customer has called 911 and the 911 operator attempts to call the customer
21 back. In addition, customers will need to re-program customer initiated features
22 like speed dialing and call forwarding after the cut is completed, adding another
23 failure point to the process.

1 The FCC recognized that because “mass market customers generally
2 demand reliable, easy-to-operate service and trouble-free installation,” such
3 disruptions and delays negatively affect customers’ perceptions of the CLEC’s
4 ability to provide service. (*Order* ¶ 467.) Indeed, the FCC found in the *Triennial*
5 *Review Order* that customers experiencing such difficulties are likely to blame the
6 CLEC, not the ILEC, even if the problem is caused by the ILEC. (*Order* ¶ 467.)
7 Moreover, because customers view the ILEC as a baseline alternative to the
8 CLEC for local service, customers’ negative perception of a CLEC’s service
9 directly hampers a CLEC’s ability to win and retain customers. (*Order* ¶ 466.)

10 **Q. WHAT WAS THE FCC’S ULTIMATE CONCLUSION?**

11 A. The FCC found that CLECs are impaired nationally without access to the ILECs’
12 unbundled local switching. The FCC recognized that numerous operational
13 impediments make UNE-L currently infeasible, or, at most, possible only to a
14 limited extent, and then only with a great risk of negative customer experience.
15 Based on the FCC’s reasoning, these operational impediments must be identified
16 and resolved before UNE-L can be considered a viable service delivery method.

17 **Customer Expectations**

18 **Q. HOW HAVE CHANGES IN THE TELECOMMUNICATIONS INDUSTRY**
19 **AFFECTED CUSTOMERS’ EXPECTATIONS CONCERNING THEIR**
20 **ABILITY TO MOVE FROM ONE CARRIER TO ANOTHER?**

21 A. Today’s telecommunications consumer is savvier than consumers of the past
22 because of experience with long distance and local competition. Today’s
23 consumer moves frequently between carriers and expects seamless migrations.

1 Carriers must be able to provide consumers with seamless and efficient migration
2 between carriers, as well as timely repair and maintenance. If a carrier is unable
3 to provide this high level of service to customers, it will not survive as a
4 competitor.

5 **Q. HOW DOES THE LONG DISTANCE TRANSITION WORK TODAY?**

6 A. Migrations among carriers in the long distance market have set a benchmark for
7 customers' expectations concerning migration among local providers. Through
8 years of experience and expense, ILECs and interexchange carriers ("IXCs")
9 developed the Primary Interexchange Carrier ("PIC") process, using the Customer
10 Account Record Exchange Interface ("CARE") interface. It has taken nearly
11 fifteen years of PIC process improvements since CARE was introduced in 1988
12 for transitions between long distance providers to be as smooth as they are today.
13 For the majority of all such transactions, this process is completely automated –
14 the order comes into the underlying service provider's computer system
15 containing customer data, and if the order meets basic criteria, it flows through
16 the system to the switch, where the PIC is changed, and then a confirmation
17 message is sent directly to the new IXC. The entire process takes approximately
18 twelve hours. Thus, because of a standard, automated process that was created
19 through years of refinement and cooperation, transitioning between long distance
20 providers is the quick and relatively problem-free process that customers have
21 come to expect.

22 **Q. IS THERE A SIMILAR EXPERIENCE TODAY IN THE LOCAL**
23 **SERVICE ARENA?**

1 A. Yes, for most customers, UNE-P transitions are also relatively seamless. CLECs
2 and BellSouth have worked together since the passage of the Act to develop an
3 automated process for the smooth migration to UNE-P of retail, resale, and
4 CLEC-served UNE-P local voice customers. Today, the customer does not know
5 that the process is occurring until it is completed and the new carrier's features
6 and functionalities, such as voice mail, appear on his line. Since BellSouth no
7 longer issues disconnect and new orders for UNE-P migrations, only rarely is
8 there loss of dial tone, the need for coordination between BellSouth and the
9 CLEC, or manual intervention at the central office MDF. Rather, just as in the
10 long distance world, the CLEC sends an automated request to BellSouth for the
11 migration of the new CLEC customer, and the change is made. In this way, the
12 UNE-P process is quite similar to the CARE long distance process, and is indeed
13 no different from the customer's experience in changing features of its BellSouth
14 service without changing providers. As a result of the industry efforts concerning
15 UNE-P, millions of customers have been migrated successfully from BellSouth to
16 UNE-P CLECs, and from one UNE-P CLEC to another UNE-P CLEC, with no
17 loss of dial tone and no need for central-office-based installation and maintenance
18 support.

19 **Q. CAN YOU PROVIDE A MORE DETAILED DESCRIPTION OF THE**
20 **UNE-P MIGRATION PROCESS?**

21 A. Yes. The process of migrating a BellSouth customer to CLEC UNE-P service
22 proceeds is outlined in Exhibit SL-1.

1 **Q. HOW LONG DOES THE UNE-P MIGRATION PROCESS GENERALLY**
2 **TAKE?**

3 A. The entire retail-to-UNE-P migration process is typically completed within one
4 business day, regardless of the features ordered. CLECs can send and receive
5 large numbers of transactions (including migrations, disconnections, and feature
6 changes) per hour, because the process is almost wholly electronic. And these
7 transactions can be completed on the same day, without the need to negotiate with
8 a project manager or schedule work times. Most importantly, just like a long
9 distance PIC change, the UNE-P migration process is relatively seamless to the
10 customer and allows customers to change carriers whenever they wish.

11 **Q. IS IT IMPORTANT THAT CUSTOMERS BE ABLE TO CHANGE**
12 **PROVIDERS RAPIDLY AND SEAMLESSLY?**

13 A. Yes, as noted above, today's consumer changes carriers more frequently than
14 consumers of the past and expects to be able to do so in an efficient and timely
15 manner. In the telecommunications industry, this movement of customers to and
16 from carriers is commonly referred to as "churn." Churn generally describes the
17 behavior of customers as they move not just from BellSouth to a CLEC but also
18 from a CLEC to BellSouth and from a CLEC to another CLEC. Today,
19 migrations between CLECs that use UNE-L (for example, from CLEC 1 UNE-P
20 to CLEC 2 UNE-L or CLEC 1 UNE-L to CLEC 2 UNE-L) are not seamless,
21 quick or efficient; indeed, they usually take extended periods of time and often
22 fail. Without a simple and seamless method to transfer customers between
23 providers using different facilities-based service delivery methods, customers may

1 become “stuck” and unable to exercise their choice to leave one carrier and
2 migrate to another.

3 **Q. IS CHURN A BAD THING OR A GOOD THING?**

4 A. It is really both. Churn is a good thing for consumers, because it allows them to
5 try new products and services from varying providers. Such consumer movement
6 encourages carriers to innovate and become more efficient, and, in turn, rewards
7 that innovation and efficiency. In a very real sense, churn is the proof that the
8 competitive process is working. Although good for consumers, churn is
9 problematic for industry players: not only is it expensive when consumers pick a
10 provider for only a short period of time and then leave for another provider, but
11 churn also complicates both the record keeping and billing processes that
12 accompany acquiring and losing a customer for both the acquiring carrier and the
13 underlying network service provider. However, competitors realize that churn –
14 the customer’s ability to move amongst providers quickly and efficiently – is a
15 necessary and integral part of a competitive telecommunications landscape.
16 Consumers cannot be “locked in” to a single provider or “stranded” on a single
17 service delivery platform. They must be able to make choices and migrate among
18 providers at will.

19 **Q. IS THERE A LOT OF CHURN IN THE INDUSTRY TODAY?**

20 A. Yes, as I discussed above, customers are more educated and savvy today and
21 move more frequently among carriers to get better service packages. Churn rates
22 today are fairly high in the telecommunications industry, in both long distance
23 and UNE-P local markets. These high churn rates have been enabled by

1 regulatory requirements and changes in the OSS of the carriers. Specifically,
2 equal access in the long distance arena, and UNE-P and electronic order
3 processing in the local service arena, have facilitated customer migrations and
4 permitted churn to exist and accelerate.

5 **Operational Impairment**

6 **Q. ARE THERE UNE-L PROVIDERS SERVING MASS MARKET**
7 **CUSTOMERS ON A BROAD SCALE TODAY?**

8 A. No. There are virtually no UNE-L providers from which mass markets (and
9 particularly residential) customers can choose, and those providers that do exist
10 provide service in limited areas and support a limited range of customers.

11 **Q. WHY NOT?**

12 A. There are a number of economic and operational reasons. One of the operational
13 reasons is that a migration to and from the UNE-L service delivery method is
14 anything but simple. The systems and processes involved in a UNE-L migration,
15 as opposed to a UNE-P migration, are complex, manually intensive and
16 cumbersome.

17 **Q. WHAT MAKES THE UNE-L MIGRATION PROCESS SO COMPLEX?**

18 A. Unlike UNE-P, UNE-L requires a physical change to the facilities involved in
19 providing service to the customer because the loop serving the customer must be
20 physically disconnected from the BellSouth retail or CLEC UNE-P facilities and
21 then connected to the UNE-L carrier's facilities in the BellSouth central office.
22 Moreover, UNE-L requires an unprecedented exchange of information between
23 the multiple parties involved, including providers not generally involved in the

1 processes reviewed and tested by the Authority. The process flow shown in
2 Exhibit SL-2 illustrates the pre-ordering, ordering, provisioning, maintenance and
3 repair and billing steps involved in a typical BellSouth retail to CLEC UNE-L
4 migration. The migration process is described in narrative terms in Exhibit SL-3.

5 **Q. ARE THERE COMPLEXITIES THAT THE DIAGRAM IN EXHIBIT SL-2**
6 **DOES NOT INCLUDE?**

7 A. Yes, while this process flow outlines the steps in a typical BellSouth retail to
8 CLEC UNE-L migration, there are several things that it simply cannot illustrate
9 adequately: (1) at numerous points in this process, manual handling of the UNE-
10 L migration tasks is required, often resulting in errors and delay; (2) UNE-L flow
11 through rates are lower than that of UNE-P, causing still more manual work and,
12 hence, more delay; (3) there is a significant amount of information that must be
13 exchanged among various parties to the migration, and the failure of this
14 information to reach its destination in a timely and accurate manner could
15 significantly affect a customer's service; and (4) the scalability of this process to
16 meet mass-market volumes is doubtful and untested because loops have never
17 been migrated at mass market volumes at this time. All four of these issues
18 individually or in combination if left unresolved have the potential to derail a
19 competitor's ability to utilize UNE-L to serve mass-market customers.

20 **Q. IS THE UNE-L MIGRATION PROCESS READY FOR MASS-MARKET**
21 **USE?**

22 A. Absolutely not. If carriers move from a UNE-P to a UNE-L service delivery
23 method before the processes and procedures are in place to allow migrations to

1 take place quickly and efficiently, the churn that is a trademark of competition in
2 the long distance and UNE-P markets will create significant problems both for
3 carriers and customers. Without seamless and efficient migration processes in all
4 directions and among all carriers, customers' attempts to migrate away from their
5 existing carriers could overwhelm the ability of carriers to accommodate those
6 moves. The result could be that customers are in effect held hostage to
7 cumbersome untested processes that cannot support the volume of orders being
8 issued.

9 In addition, the description and process flow discussed above only outlines
10 the retail to CLEC UNE-L migration. This migration is only one of several
11 migration scenarios that CLECs will encounter in a dynamic competitive UNE-L
12 market. The core scenarios (as seen from MCI's perspective) include the
13 following:

- 14 • Retail to MCI UNE-L migration
- 15 • MCI UNE-P to MCI UNE-L conversion (the "batch" conversion process)
- 16 • CLEC UNE-P to MCI UNE-L migration
- 17 • CLEC UNE-L to MCI UNE-L migration
- 18 • MCI UNE-L to BellSouth retail migration
- 19 • BellSouth retail DSL customer (line sharing or FastAccess) to MCI line
20 splitting via UNE-L
- 21 • Line-splitting UNE-P CLEC to MCI UNE-L line splitting (voice and data)
22 migration

1 This list is by no means exhaustive, but illustrates the kinds of migrations
2 that carriers will need to be able to process on a regular basis. The sheer number
3 of scenarios that must be handled gives some indication of the complexity that
4 moving to UNE-L will entail. Moreover, many of these scenarios involve greater
5 complexity than the retail-to-MCI migration, because some involve additional
6 parties and some involve DSL service. MCI has attached these core migration
7 process flows to this testimony as Exhibit SL-4. Included in these process flows
8 are numbered points in the process where potential challenges may well exist as
9 well as a glossary of relevant acronyms.

10 **Q. PLEASE GIVE SOME EXAMPLES OF THE COORDINATION**
11 **BETWEEN THE CLEC, BELL SOUTH AND THE CUSTOMER THAT IS**
12 **REQUIRED TO EFFECT A UNE-L MIGRATION.**

13 A. A cutover from BellSouth to a UNE-L CLEC requires coordination between the
14 CLEC and BellSouth to request the physical movement of the loop, to test the
15 loop once it has been moved, and to create and issue the E911, and LNP
16 transactions. Moreover, if a customer is served by IDLC, a dispatch to the remote
17 terminal or even the customer premise may be required. The highly manual nature
18 of the process is presumably the reason that BellSouth has included a project
19 manager in its batch hot cut proposal; a skilled manager is needed to coordinate
20 the many manual activities (including the scheduling of the individual hot cuts)
21 involved in the hot cut process.

22 In all migrations, the customer will need to participate, too, by reprogramming
23 features such as speed dial or variable call forwarding and perhaps remaining at

1 home for a technician visit to connect the new loop and potentially to make
2 changes to the inside wire termination at the NID.

3 **Q. IS MOVING BETWEEN CLECS ALSO DIFFICULT?**

4 A. Yes. Once a customer is on a loop, the process of moving between CLECs
5 becomes more complicated, because BellSouth no longer has a record of the
6 customer in its systems.

7 **Q. PLEASE DESCRIBE THE COORDINATION THAT IS REQUIRED**
8 **BETWEEN CLECS TO EFFECT A UNE-L CLEC-TO-CLEC**
9 **MIGRATION.**

10 A. A CLEC-to-CLEC migration requires the winning and losing CLEC to cooperate
11 to provide the information necessary to reuse the customer's existing facility (the
12 loop) while notifying all the switches in the worldwide network that the
13 customer's telephone number has moved from one carrier to another. And both
14 the winning and the losing CLEC have to work with BellSouth to coordinate the
15 movement of the customer's loop from one collocation cage to another. The
16 winning CLEC has to work with the losing CLEC to select a date for the
17 migration and they have to ensure that the losing CLEC's "port out" request to
18 BellSouth will "mate" with the winning CLEC's migration request. If the port out
19 request is rejected, the CLECs must negotiate a new due date and start all over
20 again.

21 **Q. WHAT NEEDS TO BE DONE TO ADDRESS THE ISSUES OF MANUAL**
22 **PROCESSING AND MULTIPLE PARTY COORDINATION?**

1 A. MCI recommends that the Authority consider these issues in the companion Hot
2 Cuts docket (No. 03-00526) or open a separate docket to address these issues and
3 additional operational issues such as the ones I raise below. Within such a docket,
4 the Authority could establish an industry workshop in which operational issues
5 are raised and addressed under the Authority's supervision.

6 **Q. DO YOU EXPECT THERE ARE OTHER OPERATIONAL BARRIERS**
7 **THAT EXIST FOR UNE-L THAT MCI HAS NOT YET DISCOVERED?**

8 A. Yes. As with the development of UNE-P, operational issues will emerge as
9 carriers develop their systems to process UNE-L ordering and provisioning.
10 Today, I am only discussing issues that I am aware of as of the time of this filing.
11 Many new issues can be expected to arise as carriers move toward UNE-L
12 service, and the industry and the Authority will need to address those problems
13 during the process of removing operational barriers to UNE-L.

14 **Q. YOU ALSO MENTIONED OPERATIONAL ISSUES RELATING TO**
15 **INFORMATION EXCHANGE. PLEASE EXPLAIN WHAT YOU MEAN**
16 **BY THAT.**

17 A. There are multiple points where there are changes to customer records and
18 information in both internal and external databases that are required for migration
19 to a UNE-L service delivery method. Many of these changes result from the fact
20 that the CLEC switch will be used in the provision of service with UNE-L versus
21 the BellSouth switch that is used with UNE-P. Because there is very little mass
22 market UNE-L competition today there are a great many unanswered questions
23 surrounding these transfers and information exchanges. These exchanges of

1 information all represent potential points of failure with UNE-L. These
2 coordination, database, and ordering issues represent operational barriers that are
3 of critical importance to both the customer and the service provider.

4 I will describe information exchange issues involving databases relating to
5 CSRs, LFACS, E911, NPAC, LIDB, CNAM, DL/DA and printed directories.

6 Changes to these databases must take place as efficiently and seamlessly as
7 possible in every UNE-L scenario. In addition, I will discuss the changes to
8 trouble handling that must take place before UNE-L customers can expect the
9 level of repair service to match that of UNE-P. After outlining these issues, I also
10 will discuss approaches MCI recommends for addressing them, which should
11 provide at least a starting point for resolution.

12 **Q. PLEASE EXPLAIN THE CSR ISSUE.**

13 A. Obtaining accurate and complete customer information is essential to a CLEC's
14 ability to submit a valid order. CSRs are used to identify address, feature,
15 directory and other information for migrating customers. CSRs show the most
16 current customer configuration based on the switch port and the current carrier's
17 internal billing systems. During the pre-order phase of a migration, the CLEC
18 representative needs to obtain current customer and service information to create
19 the order. While this information can be retrieved on a real time basis for
20 BellSouth retail customers (and some UNE-P CLEC customers), the systems and
21 processes required to obtain and share this information have not been developed
22 for all migration scenarios, most notably CLEC-to-CLEC migrations.

23 **Q. IS THIS AN ISSUE FOR INITIAL MIGRATIONS FROM BELL SOUTH?**

1 A. No. This is not an issue in initial migrations from BellSouth because BellSouth
2 now allows UNE-P customers to be migrated by telephone number and house
3 number, both of which are contained in BellSouth's CSRs.

4 **Q. IS THIS PROCESS THE SAME WITH ALL MIGRATIONS?**

5 A. No. Obtaining this type of customer information becomes much more difficult in
6 a CLEC UNE-L-to-CLEC UNE-L migration because BellSouth no longer has the
7 current customer configuration information. Although the participants in a
8 Florida collaborative have agreed to a 48 hour timeframe for exchanging CSR
9 data, there is no way to ensure that this timeframe is met, and numerous problems
10 with the process still exist. For example, the "winning" CLEC must contact the
11 "losing" CLEC by e-mail, fax, through a web site, or most often, by telephone, to
12 obtain the relevant information. Obtaining information by telephone is not only
13 manually intensive, but is made all the more difficult because there is no complete
14 list of who and when to call. The manual nature of the process means it takes a
15 long time (as opposed to instantaneous transmission for UNE-P) and has a greater
16 margin for error because as yet, there are no CLEC CSR standards for database
17 integrity. MCI's small business team has had significant problems in obtaining
18 CSRs from a number of the CLECs active in the BellSouth territory. To make
19 matters worse, each carrier's CSR looks different and must be interpreted
20 differently, which gives rise to miscommunication.

21 **Q. IS MORE INFORMATION REQUIRED FOR UNE-L MIGRATIONS**
22 **THAN CLECS CURRENTLY PROVIDE TO EACH OTHER?**

1 A. Yes. Once the customer has migrated to a UNE-L CLEC, additional information
2 is required to effect a subsequent customer move. For example, the carrier to
3 whom the customer is migrating needs the customer's "circuit ID," which will be
4 used by BellSouth to track where the customer exists on the main distribution
5 frame of BellSouth's switch. The circuit ID generally is not included in the CSR,
6 but rather is passed to the first UNE-L CLEC when BellSouth returns a firm order
7 confirmation. The circuit ID is critical, since the winning CLEC will need that
8 information to ensure that the same physical loop can be used to serve the
9 customer, and BellSouth needs the circuit ID to provision the customer's existing
10 loop to the winning CLEC, rather than having to find and provision another loop
11 that its systems show to be available. Because all of the information needed for
12 UNE-L migrations is not readily available – either because BellSouth no longer
13 maintains it or the losing CLEC refuses to provide it, or because there are not
14 reliable, comprehensive systems for transferring this information among CLECs –
15 a new pre-order processes, including a new method of obtaining CSRs from all
16 industry players must be developed for UNE-L.

17 **Q. WHAT CSR INFORMATION DOES MCI REQUEST BE INCLUDED?**

18 A. MCI needs the customer's billing telephone number; working telephone number;
19 billing name and address; directory listing information (including listing type);
20 complete service address; current PICs (for both inter and intraLATA, including
21 freeze status); local freeze status, if applicable; all vertical features; options (such
22 as toll blocking and remote call forwarding); tracking or transaction number;
23 service configuration information (*i.e.*, whether customer is served via resale,

1 UNE-P, UNE-L, etc.); the identification of the network service provider, and the
2 identification of any line sharing or line splitting on the line; the BellSouth feature
3 name and USOC for vertical features and blocking options to ensure that CLECs
4 can understand each other's CSRs; circuit ID information; and identification of
5 line sharing/line splitting providers. Currently, some CLECs are not providing
6 any CSR information, while in other cases the information is provided slowly.
7 Some CLECs that provide CSR information do not include all the customer's
8 features or the customer's circuit ID, or do not provide an accurate circuit ID.

9 **Q. DO THESE CSR ISSUES AFFECT A CUSTOMER'S ABILITY TO**
10 **MIGRATE BETWEEN UNE-L CLECS?**

11 A. Yes. This CSR issue must be addressed and the infrastructure developed prior to
12 the implementation of UNE-L. Otherwise, customers will be stuck where they
13 land in their first migration or BellSouth will be forced to install more and more
14 facilities to compensate for the inability to identify the current circuit being used.

15 **Q. DOES MCI HAVE A PROPOSAL TO RESOLVE THESE CSR ISSUES?**

16 A. Yes. MCI proposes the establishment of a distributed CSR retrieval system,
17 similar to the CARE Clearinghouse, which would be used by CLECs and
18 BellSouth alike to route requests for CSR information to the customer's current
19 carrier. The ability to obtain a CSR, including circuit ID information, from all
20 CLECs will be necessary before UNE-L migrations can be handled on the same
21 basis as UNE-P migrations.

22 **Q. PLEASE EXPLAIN THE DISTRIBUTED DATABASE CONCEPT IN**
23 **MORE DETAIL.**

1 A. MCI recommends that a central clearinghouse be established to identify the owner
2 of a particular customer and to forward queries to the current provider to retrieve
3 that customer's service information. The Clearinghouse would serve as a hub for
4 CSR requests, directing them to the proper providers following a single data
5 communications protocol. CLECs would maintain CSRs in a standard format and
6 would agree to standard delivery methods and time frames. CLECs could also
7 establish direct communications between each other if the volume of requests
8 warranted it. Companies that did not want to maintain their own CSRs or could
9 not develop the software necessary to electronically transmit that information to
10 the clearinghouse could contract with third party vendors (or even BellSouth) to
11 support this process. State commissions would need to develop standards and
12 procedures to ensure that information was exchanged within the appropriate time
13 frames.

14 **Q. WHAT CAN BELL SOUTH DO TO SUPPORT THE CLEC TO CLEC**
15 **MIGRATION PROCESS NOW?**

16 A. BellSouth currently allows CLECs who have agreed to view each other's UNE-P
17 CSRs to do so via the LENS GUI. MCI has issued a change request to BellSouth
18 to allow these CSRs to be provided via EDI. BellSouth should implement this
19 change request immediately and, in addition, should remove the requirement that
20 CLECs contract with each other in order to take advantage of this functionality.
21 In addition, until a CSR Clearinghouse is developed BellSouth should modify its
22 CSR databases to continue to provide access to the underlying information about

1 customers and their service remaining with BellSouth after a customer has
2 migrated to UNE-L, as has been recommended in the Florida collaborative.

3 **Q. WHY IS LFACS IMPORTANT?**

4 A. Before migrating a customer to UNE-L, MCI must determine whether that
5 customer is served by IDLC. MCI does this by submitting a loop make-up
6 inquiry to LFACS. The accuracy of the data retrieved from this database is critical
7 to the CLEC's ability to determine if it can serve the customer, particularly for
8 combined voice and data offerings (DSL). For example, the CLEC needs to know
9 if the customer's loop is copper (and can be unbundled) or is served through an
10 IDLC system, or whether the customer has fiber to the home. BellSouth will
11 select one of eight unbundling methods for customers served by IDLC and will
12 not unbundle fiber to the home, so this pre-order information is critical in
13 determining whether the customer can be migrated to a CLEC's switch. It is also
14 critical in determining whether customers may obtain DSL after their migration.

15 **Q. IS THE DATA CONTAINED IN LFACS ACCURATE?**

16 A. At this point we do not know. Given the current low level of UNE-L and DSL
17 competition, it is difficult to know how inaccurate LFACS data is, despite testing
18 done during the 271 process. More importantly, as churn continues and more
19 customers are migrated to UNE-L, won back by the ILEC, and then migrated to
20 other companies, the quality of this database may degrade.

21 **Q. HOW DOES MCI PROPOSE TO RESOLVE THIS ISSUE?**

22 A. MCI proposes that LFACS be audited for accuracy and that a process be
23 developed to ensure that it is accurately maintained in real time when BellSouth

1 alters or changes its loop plant. This is particularly important as BellSouth takes
2 down its copper plant and replaces it with fiber. In addition, when a CLEC
3 determines that a customer is served by IDLC but spare copper is available, it
4 must be able to “reserve” that facility as part of the UNE-P to UNE-L or retail to
5 UNE-L migration process to ensure that the customer can be moved. SBC is
6 currently reviewing this request as part of the line splitting process. Currently,
7 while LFACS will allow a CLEC to determine whether there is spare copper to
8 support the unbundling of the customer’s service, that copper loop may be
9 “taken” by another CLEC or BellSouth itself to serve another customer during the
10 process of migrating that customer or changing that customer’s loop to allow the
11 provision of data services.

12 **Q. HOW IS UNE-L TROUBLE HANDLING DIFFERENT THAN TROUBLE**
13 **HANDLING FOR UNE-P CUSTOMERS?**

14 A. Since UNE-P is provided by combining existing elements of the BellSouth
15 network, customer network issues can be resolved in the same way for a UNE-P
16 customer as they are for a BellSouth retail customer. The CLEC uses the
17 BellSouth Mechanized Loop Test (“MLT”) system to identify the trouble and
18 dispatch the required repair personnel. When a customer moves to UNE-L, his
19 service is provided as two separate components – the BellSouth loop and the
20 CLEC switch and collocation equipment. CLECs will need to isolate the trouble
21 to the company responsible for its repair and then dispatch two separate repair
22 forces (CLEC resources to repair their switches and collocation equipment and

1 BellSouth forces to repair the loop or NID) before the customer's service can be
2 restored. This will take additional time that may impact customer service.

3 In a UNE-L environment, MCI representatives gather the appropriate
4 information from the customer and make an initial trouble assessment. To do
5 this, MCI must "sectionalize" the trouble and determine whether a dispatch to the
6 MCI switch, a dispatch to the MCI collocation, a dispatch to the BellSouth the
7 frame, or a dispatch out to the field is required. If the problem is in MCI's portion
8 of the network, MCI either must dispatch a technician to its collocation cage or
9 work with BellSouth to clear the problem. If no trouble is found on MCI's
10 network, typically MCI will request BellSouth to determine if the problem is with
11 BellSouth's network. If no trouble is found after a "dispatch in" to BellSouth, the
12 initial ticket may be closed and MCI may have to open a new ticket if it turns out
13 the problem lies at the MDF or the facility running from the frame to MCI's
14 collocation space. This process thus can lead to increased out of service times
15 and harm customers by putting them in the middle of "finger pointing" exercises.

16 **Q. WHY IS THIS AN ISSUE?**

17 A. Since few mass markets customers today have UNE-L service, this trouble
18 handling process has not yet been adapted for a world where customer service
19 outages must be repaired rapidly so that residential customers can continue to be
20 able to receive dial tone at the same rates as BellSouth customers.

21 **Q. HOW DOES MCI PROPOSE TO HANDLE THIS ISSUE?**

22 A. For trouble handling in a UNE-L environment to work properly, CLECs like MCI
23 need to obtain newer and more advanced test equipment as well as to develop

1 internal processes to address this trouble handling and the anticipated volumes. In
2 addition, all parties need to make sure that the dispatch rules surrounding trouble
3 handling are adequate, function properly and are scaled to mass market volumes.
4 These kinds of issues lend themselves to a workshop process under Authority
5 supervision, along the lines I already have discussed.

6 **Q. WHEN A CUSTOMER MIGRATES TO UNE-L ARE THERE CHANGES**
7 **INVOLVING A CUSTOMER'S E911 INFORMATION?**

8 A. Yes. When a consumer migrates to a UNE-L CLEC, the 911 database must be
9 updated to reflect the new switching provider. A customer's migration to a UNE-
10 L CLEC requires BellSouth to "unlock" the E911 database, allowing the CLEC
11 record to overlay the existing BellSouth record with updated information,
12 including the CLEC company code and 7x24 emergency number as well as the
13 current customer address information if necessary.

14 **Q. WHAT HAPPENS IF THE CHANGE IS NOT MADE CORRECTLY?**

15 A. If this change is not made correctly, the customer's E911 information in the
16 Automatic Line Identification ("ALI") database will not include the CLEC's
17 company ID or the customer's correct address if the customer has moved or the
18 record required some other correction. It is essential that this change to E911 be
19 done correctly and also that it be seamless and transparent to the migrating
20 consumer.

21 **Q. IS THIS CHANGE REQUIRED FOR UNE-P?**

22 A. No such change is required for UNE-P because BellSouth retains control over the
23 911-database information for the UNE-P CLEC and continues to provide trap and

1 trace and law enforcement and health and safety functions. Because there is no
2 change to the E911 database, there is little if any chance for errors to be
3 introduced and no additional data requirements for the Public Safety Answering
4 Position (“PSAP”) administrators.

5 **Q. COULD YOU EXPLAIN THE NECESSARY E911 CHANGE IN MORE**
6 **DETAIL?**

7 A. BellSouth in most cases maintains the 911 selective router used for routing a 911
8 call to the appropriate PSAP. The PSAP dips into the ALI database when a 911
9 call is received to retrieve the address of the caller. The PSAP is the custodian of
10 the data required to dispatch emergency personnel. The PSAP must have a record
11 for each customer a facilities CLEC has and must be able to contact that carrier.
12 Thus, in a UNE-L environment, there are two orders required for changes to the
13 911 ALI database. One order must go from BellSouth to the 911 provider to
14 unlock the record in the ALI database. This allows the CLEC to overlay the
15 existing record with the updated 911 ALI record, once the migration has been
16 successfully processed.

17 The second order must go through the CLEC’s vendor (or BellSouth if the
18 CLEC has contracted with it) to overlay the existing 911 record with the new
19 record. It is essential that these orders are coordinated so that the BellSouth
20 “unlock” order arrives before the CLEC “create” order to newly populate the
21 database.

22 A critical issue here is the timing of the “unlock” order. BellSouth sends
23 the 911 “unlock” order after the UNE-L work order has been closed in the

1 provisioning system (WFA). The CLEC receives the closure information via the
2 normal service order completion transaction (SOC) or via a telephone call if it
3 chooses the costlier coordinated hot cut option. If this notifier is delayed or lost,
4 the CLEC will not know that the loop order has completed, which may delay its
5 911 transaction. MCI recommends that BellSouth resolve this problem by
6 providing an on-line tracking system similar to that provided by Verizon and
7 proposed by SBC to provide real time notification of order status. Because there
8 will necessarily be a time lag where the 911 system has incorrect information on
9 the network service provider, customers or law enforcement personnel who
10 request a “trap and trace” on the line will be delayed until the proper service
11 provider is identified.

12 **Q. WHAT HAPPENS IF THE ORDERS ARE NOT SEQUENCED**
13 **CORRECTLY?**

14 A. If the sequence of the orders is disrupted, the 911 database cannot be updated.
15 While the customer will be able to dial 911, the PSAP will only see the old
16 customer record, which may or may not be accurate and will contain the wrong
17 company ID for correction or trap and trace requests or the wrong address if the
18 customer has moved and then obtained UNE-L service from a CLEC. As the
19 number of UNE-L orders increases and particularly during the bulk transition of
20 customers from UNE-P to UNE-L, the problem will become more severe. In
21 addition, the CLEC will be required to check the PSAP information manually to
22 determine if the update has been accepted and has passed the myriad of required
23 edits.

1 **Q. HOW SHOULD THIS PROBLEM BE FIXED?**

2 A. Aside from requiring BellSouth to comport with the NENA guidelines as
3 discussed above, these critical 911 orders must be coordinated through the various
4 systems and processes of all industry players in order to ensure that migration to
5 UNE-L does not result in E911 problems. MCI suggests that these issues be
6 addressed through a workshop process under the Authority's supervision. As
7 operational barriers to UNE-L are overcome and CLECs transition to that service
8 delivery method, it will be essential to ensure that the required 911 data are
9 accurate as well as seamless and transparent to the consumer. In addition, the
10 Authority, BellSouth, and the CLECs should work with the 911 database
11 providers to improve the error handling capabilities of the system. Currently, 911
12 errors are returned to CLECs in batch files rather than in real time. This increases
13 the potential for late or inaccurate updates to the database.

14 **Q. ARE THERE ISSUES INVOLVING NPAC IN A UNE-L MIGRATION?**

15 A. Yes. NPAC handles the data base updates necessary to determine the "home
16 switch" for each UNE-L customer -- that is, the switch that provides the customer
17 with dial tone.

18 **Q. ARE NPAC CHANGES NECESSARY WITH UNE-P?**

19 A. No. Since UNE-P uses BellSouth switching, there is no need to send transactions
20 for UNE-P migrations to the NPAC, keeping the number administration task to a
21 manageable level. When CLECs move to UNE-L, however, such transactions
22 become a necessary and integral part of the process – and one that is currently
23 untested at mass-market volumes.

1 **Q. PLEASE EXPLAIN.**

2 A. When a customer migrates to UNE-L, a transaction must be sent to NPAC to
3 identify the “destination” switch for calls to this number. BellSouth initiates this
4 transaction by creating a “10 digit trigger” in the donor (losing) switch at the time
5 the UNE-L order is created. The trigger will cause incoming calls to “dip” into
6 the NPAC database to determine the switch that now houses the number. The
7 CLEC initiates the second step of this process when it receives notification from
8 BellSouth that the cut has been completed. The CLEC then sends a transaction to
9 NPAC to claim the number. Until the CLEC claims the number in the NPAC
10 database, the customer will be unable to receive any incoming telephone calls.
11 Thus, while a customer will be able to call 911 before the porting activity is
12 complete, he or she will not be able to receive a call back until the transaction is
13 sent and the number is distributed to all the switches in the network. If the NPAC
14 transaction is not completed successfully -- for example, if the NPAC system is
15 down, the request is formatted incorrectly, one of the switches in the network is
16 slow to or unable to update, or BellSouth has not notified the CLEC that the cut is
17 complete -- the customer will not be able to receive calls or voice mail messages,
18 since calls will be directed to the incorrect home switch. Incoming callers will
19 hear a message stating that the line has been disconnected, leading to more
20 confusion and problems. It is essential that the NPAC process be coordinated and
21 successful. If it is not, consumers could experience service problems that do not
22 exist today with UNE-P.

1 The LNP process becomes even more complicated when a UNE-L
2 customer migrates to a second CLEC. When the customer changes carriers again,
3 the losing carrier must “unlock” the existing record to allow the winning carrier to
4 “replace” it with its destination code. Both churn and the addition of the ability
5 for customers to migrate their numbers between wireless carriers and from
6 wireline to wireless carriers will raise the number of transactions processed by the
7 NPAC tremendously. It is unclear whether NPAC will be able to handle the
8 volumes of transactions that would occur in a dynamic UNE-L market. In
9 addition, the error checking rules for the NPAC are unclear and must be tested to
10 ensure that the correct numbers are ported. If NPAC cannot handle the volumes
11 or error rates are significant, changes to the NPAC process will undoubtedly
12 prove necessary.

13 The current experience of customers trying to port their number between
14 wireless carriers provides a good example of the problems that are occurring in
15 the local number portability process. The number portability problems are
16 causing many customers to carry two telephones, one from their new provider and
17 one from their old provider, to ensure that they will continue to receive calls.
18 While this is merely inconvenient to wireless customers (and more expensive than
19 necessary) customers can still receive calls directed to their number. With
20 wireline local number portability, customers would have no work-around to
21 receive calls until the number was properly ported over to the carrier providing
22 dial tone via a UNE-L loop to the residence.

23 **Q. DOES MCI HAVE ANY SUGGESTED RESOLUTION TO THIS ISSUE?**

1 A. MCI recommends that the Authority address this issue in a workshop with
2 BellSouth, CLECs, the NPAC administrator (Neustar) and representatives of
3 NANPA, the National Numbering Plan Administrator, which manages and
4 develops requirements for the NPAC database, to determine NPAC's actual
5 capabilities and to develop metrics for the completion of number portability tasks
6 in a UNE-L environment. Volume testing or scalability analysis also will be
7 required to determine whether NPAC actually can handle the volumes of numbers
8 that will be ported in a single day. Since a failure of the NPAC system will have
9 a direct negative impact on customers, it is critical that the movement to UNE-L
10 for mass markets customers not take place until all parties are clear that the
11 system can support the increased volumes.

12 **Q. ARE THERE ISSUES WITH LIDB AND CNAM?**

13
14 A. Yes. The LIDB and CNAM databases provide information on caller identity and
15 blocking options. UNE-P customers today use the LIDB and CNAM databases
16 provided by BellSouth. Unless a customer of the CLEC chooses new blocking
17 options, no changes are required to the data when a customer migrates. Problems
18 arise, however, in the UNE-L context.

19 **Q. WHY IS THE SITUATION DIFFERENT FOR UNE-L?**

20 A. Today, when a customer migrates a telephone number to a UNE-L carrier, the
21 losing company deletes the telephone number's LIDB and CNAM information
22 from its LIDB and CNAM databases and the acquiring carrier therefore needs to
23 load the telephone numbers' LIDB and CNAM information internally. MCI, as

1 the acquiring carrier, loads the data internally and at its LIDB/CNAM vendor,
2 VeriSign.

3 **Q. WHY DOES THE NEED TO LOAD LIDB AND CNAM INFORMATION**
4 **GIVE RISE TO PROBLEMS?**

5 A. The LIDB and CNAM data entry step is performed while the migration order is in
6 the order entry stage. CLECs either must create CNAM data from published
7 sources, which results in a substandard database because not all necessary data is
8 available publicly, or dip the BellSouth systems to receive the data at a per dip
9 TELRIC rate. In most jurisdictions, CLECs are not entitled to take a download of
10 the entire database from BellSouth. Under the *Triennial Review Order*, the
11 database dips referred to above will no longer be at TELRIC pricing. As a result,
12 CLECs will have to choose between using their substandard databases or dipping
13 BellSouth's database at a price that may exceed TELRIC.

14 **Q. WHY ARE THESE PROBLEMS SIGNIFICANT?**

15 A. LIDB and CNAM are essential databases. Customer information for migrating
16 customers whose LIDB and CNAM is not loaded or incorrect will not be
17 available for caller name display on caller ID, potentially leading to call blocking
18 by the called party and improper rejection of third party billed calls. Differences
19 between BellSouth's CNAM information and that provided by the CLEC will
20 affect customers and cause an increase in the number of "troubles" directed to the
21 CLEC's service organization, increasing cost and leading to the impression that
22 the CLECs are providing substandard service.

23 **Q. HOW DOES MCI PROPOSE THAT THIS ISSUE BE RESOLVED?**

1 A. The Authority should ensure that BellSouth charges just and reasonable rates for
2 CNAM and LIDB data dips. In addition (or at least in the alternative), CLECs
3 should be allowed to obtain a “dump” of BellSouth’s databases, at just and
4 reasonable rates, to ensure that there is consistency of information and that callers
5 are provided with the fully functional features that they require.

6 **Q. WHAT ISSUES FOR UNE-L MUST BE RESOLVED CONCERNING**
7 **DIRECTORY LISTING AND DIRECTORY ASSISTANCE?**

8 A. With UNE-L, CLECs must send directory listing information to BellSouth to
9 include in both the printed and on-line directories of each company. This step
10 occurs as part of the UNE-L migration order.

11 **Q. DO CHANGES TO DL/DA OCCUR WITH UNE-P?**

12 A. No. No changes are necessary in a migration to UNE-P.

13 **Q. DO THEY OCCUR FOR UNE-L?**

14 A. Yes. The CLEC completes the directory listing form and sends it with its order to
15 BellSouth for processing. While an “as is” (*i.e.*, no change) directory listing can
16 be ordered from BellSouth as part of the “first” retail to UNE-L migration or
17 UNE-P to UNE-L conversion, “as is” directory listings may not be appropriate for
18 subsequent changes, which means that the winning CLEC must provide complete
19 directory listing information for the customer, thereby increasing the likelihood of
20 errors or deletions in the directory as it is “opened” to remove listings and
21 “closed” to put the same listings back in. Again, the sheer volume of directory
22 changes to be processed if UNE-L were to become a viable mass-market service

1 delivery method could have significant impacts on the directory publishing and
2 operator services databases.

3 **Q. DOES MCI HAVE A PROPOSED RESOLUTION OF THIS ISSUE?**

4 A. Yes. MCI recommends that “migrate as is” functionality for directory listings be
5 available for CLEC-to-CLEC migrations as well as for BellSouth-to-CLEC
6 migrations to limit the number of times that this information must be added and
7 deleted.

8 **Q. DO THESE INFORMATION EXCHANGE ISSUES HAVE A**
9 **SIGNIFICANT EFFECT ON CUSTOMERS IN A UNE-L**
10 **ENVIRONMENT?**

11 A. Yes. All of these customer record and information changes must take place as
12 efficiently and seamlessly as possible in a UNE-L environment. It is critical that
13 these various orders and transfers of information be coordinated to the greatest
14 extent possible throughout the various systems and processes of each provider and
15 between providers. A lack of coordination could result in errors in the customer
16 records, the loss of customer data and loss of dial tone.

17 **Batch Hot Cut Process**
18

19 **Q. THE FCC REQUIRES THE STATES TO APPROVE AND IMPLEMENT**
20 **A “BATCH” HOT CUT PROCESS. WHAT IS THE PURPOSE OF THE**
21 **“BATCH” HOT CUT PROCESS?**

22 A. In an effort to alleviate some of the operational barriers to UNE-L recognized by
23 the FCC, the *Triennial Review Order* requires that the states approve a batch hot
24 cut process (“Transition Batch Hot Cut Process”) to transition UNE-P customers

1 to UNE-L by cutting over unbundled loops in high volumes from BellSouth to
2 CLECs. (*See, e.g., Order* ¶¶ 487-490.) The FCC expected that such a process
3 would enable groups of UNE-P customers to be transitioned to UNE-L
4 simultaneously in batches, thus “result[ing] in efficiencies associated with
5 performing tasks once for multiple lines that would otherwise have been
6 performed on a line-by-line basis.” (*Order* ¶ 489.) Yet although the FCC
7 recognized that such “a seamless, low-cost batch cut process for switching mass
8 market customers from one carrier to another is necessary, at a minimum, for
9 carriers to compete effectively in the mass market,” it did not view this
10 transitioning process as a panacea. (*See, e.g., Order* ¶¶ 423 (describing the batch
11 process as mitigating, not necessarily eliminating impairment), 487.) Indeed,
12 because this Transition Batch Hot Cut Process only addresses the issue of
13 transitioning to UNE-L the base of customers that competitors like MCI have
14 acquired on UNE-P, it is merely a discrete piece of the much larger puzzle that
15 must be assembled before UNE-L can be seen as a viable service delivery
16 method. In practical terms, eliminating the operational barriers associated with
17 the every day hot cut process (“Mass Market Hot Cut Process”), which will be
18 used to move customers to and from multiple carriers in a dynamic competitive
19 market, is at least as critical if not more critical than implementing a Transition
20 Batch Hot Cut Process that is only useful for simultaneously moving batches of
21 UNE-P customers to UNE-L.

22 **Q. THE FCC ALSO REFERS TO THE CONCEPT OF “ROLLING ACCESS”**
23 **IN ITS ORDER. WHAT IS “ROLLING ACCESS”?**

1 A. In the *Triennial Review Order*, the FCC raises the possibility of a state
2 commission granting CLECs “rolling access” to mass market switching, if the
3 state commission determines that such access would cure a finding of CLEC
4 impairment. (See *Order* ¶¶ 521-524.) With rolling access, CLECs would have
5 “access to unbundled local circuit switching for a temporary period [at least 90
6 days], permitting carriers first to acquire customers using unbundled incumbent
7 LEC local circuit switching and later to migrate these customers to the
8 competitive LECs’ own switching facilities.” (*Order* ¶¶ 521, 524.) In other
9 words, rolling access would allow CLECs to use UNE-P to acquire customers at
10 the outset, but then would require the CLECs to transition (that is, “roll off”)
11 those customers to UNE-L within a specified period after acquisition.
12 Theoretically, this process would enable CLECs to avoid the delays and
13 disruptions of service that would occur if CLECs had to acquire customers via
14 UNE-L at the outset, because the customers would be first acquired and then
15 transferred to UNE-L via the Transition Batch Hot Cut Process.

16 **Q. WILL ROLLING ACCESS CURE THE OPERATIONAL BARRIERS**
17 **FACING A MOVE TO UNE-L?**

18 A. No, as this description makes clear, rolling access does not remove the operational
19 impairments presented by the everyday Mass Market Hot Cut Process, because it
20 is simply a delayed batch hot cut process, one that focuses solely on transferring
21 UNE-P customers to UNE-L. As I discuss above, the Mass Market Hot Cut
22 Process will be essential for all customer transfers other than those from UNE-P
23 to UNE-L. For instance, even if CLECs have rolling access, they will not be able

1 to rely on the Transition Batch Hot Cut Process for CLEC-to-CLEC UNE-L
2 migrations. Instead, when a customer wished to be migrated from a UNE-L
3 CLEC, the customer first would have to be changed back to UNE-P so the
4 customer could then be moved to the winning carrier. This situation would be the
5 worst of all operational worlds. Therefore, regardless of whether the Transition
6 Batch Hot Cut Process or rolling access addresses some aspects of CLEC
7 impairment, it is critical that state commissions investigate and resolve the
8 substantial operational barriers associated with the Mass Market Hot Cut process
9 as well.

10 **Q. WHAT THEN SHOULD THE AUTHORITY DO WITH RESPECT TO**
11 **THE HOT CUT PROCESS?**

12 A. Although the Authority must comply with the FCC's requirement that it evaluate,
13 approve and implement a Transition Batch Hot Cut Process, that task should not
14 distract the Authority from working toward alleviating the distinct operational
15 issues associated with the Mass Market Hot Cut Process. The Transition Batch
16 Hot Cut Process necessarily will require a number of coordinated steps and
17 scheduling with BellSouth, and thus substantial BellSouth involvement and
18 oversight. In contrast, the Mass Market Hot Cut Process will need to be a
19 standardized, simple, and low-cost process that can take place on a day-to-day
20 basis. And it will have to process migrations to and from retail, UNE-P, and
21 resale customers, as well as disconnections, suspensions, and feature additions
22 and changes. Thus, although a batch hot cut process may be helpful, it simply
23 will not address the everyday operational barriers that exist in migrating

1 customers from one UNE-L CLEC to another, from BellSouth to a UNE-L CLEC,
2 and from a UNE-L CLEC to BellSouth. To address these more fundamental
3 difficulties with UNE-L migrations, BellSouth must streamline the standard Mass
4 Market Hot Cut process as well, so that it is as effective, efficient, seamless, low
5 cost and scalable as possible, but without the special scheduling and BellSouth
6 handling necessary for the Transition Batch Hot Cut Process. It is only when day-
7 to-day migrations among all carriers, using all service delivery methods, take
8 place quickly, efficiently and successfully, that a truly competitive market will
9 exist. MCI discusses in detail its hot cut proposals in its Network Impairment
10 Testimony.

11 **Q. HAS BELL SOUTH SHOWN A WILLINGNESS TO IMPROVE ITS**
12 **EXISTING BATCH ORDERING PROCESS?**

13 A. No. BellSouth recently refused to engage in a collaborative process to improve its
14 batch ordering process, as illustrated by an email the BellSouth change
15 management team e-mail sent to CLECs on November 20, 2003. (Exhibit SL-5.)
16 While the Change Control team has now “invited” CLECs to provide proposed
17 changes to the batch ordering process through the change management process,
18 no formal workshop for examining and suggesting improvements to the batch hot
19 cut process has been established and BellSouth continues to state that the batch
20 ordering process is sufficient to prove non-impairment.

21 **Q. IS BELL SOUTH’S RESPONSE SUFFICIENT?**

22 A. No. The BellSouth batch hot cut process includes numerous manual steps (such
23 as the creation of a spreadsheet listing the telephone numbers to be migrated) that

1 must be completed before the initial orders can be issued, as well as the
2 requirement that Batch Hot Cuts be treated like “projects” and managed by a
3 project manager. In addition, BellSouth (unlike the other three incumbent carriers)
4 has made no movement toward providing electronic tools for managing the hot
5 cut process, such as an on-line scheduler and an electronic order
6 tracking/management system, like Verizon’s WPTS and SBC and Qwest’s
7 proposed order status tool. The Authority should order BellSouth to work with
8 CLECs to develop a true batch hot cut process. BellSouth’s failure to work
9 directly with CLECs in a collaborative setting demonstrates that Authority
10 involvement will be required to push BellSouth to make the changes necessary to
11 make UNE-L operationally workable.

12 **Q. HAS BELL SOUTH EVEN PROPOSED A BATCH HOT CUT PROCESS?**

13 A. No, BellSouth has proposed a batch “ordering” process to meet the requirements
14 laid out in the *Triennial Review Order* rather than a true batch hot cut process.
15 The BellSouth process requires a minimum of 24 business days (7 days to
16 “negotiate” with the BellSouth project manager and 17 days to allow BellSouth to
17 prepare for the first cut date) and imposes project management onto the standard
18 ordering process. A CLEC must start the process by sending a spreadsheet listing
19 the lines that it wishes to transition to UNE-L. While BellSouth states that a total
20 of 2475 lines may be ordered at one time (99 Accounts with 25 lines each), these
21 lines will not be cut simultaneously and may even be installed on totally separate
22 due dates. After BellSouth responds to the CLEC’s spreadsheet request, the
23 CLEC must complete a “bulk migration LSR,” a new type of LSR that appears to

1 be simply a copy of the spreadsheet. BellSouth's systems "explode" the orders
2 into individual service orders that are then treated exactly as they would be under
3 BellSouth's individual LSR provisioning process. BellSouth has done nothing to
4 create the "seamless, low-cost, process" for bulk migration required by the FCC.

5 **Q. HAVE OTHER ILECS WORKED WITH CLECS TO CREATE A BATCH**
6 **MIGRATION PROCESS?**

7 A. Yes. SBC, Verizon, and Qwest have had ongoing collaboratives to work with
8 CLECs to develop a batch migration process. SBC, Qwest, and Verizon have
9 proposed automated processes that will allow the CLEC to select a due date for its
10 orders and automated tools to track orders. Verizon's tool, WPTS, is already
11 available, while SBC and Qwest have committed to implementing the OSS
12 changes necessary for these automated tools by the end of 2004.

13 **Q. PLEASE BRIEFLY SUMMARIZE YOUR TESTIMONY.**

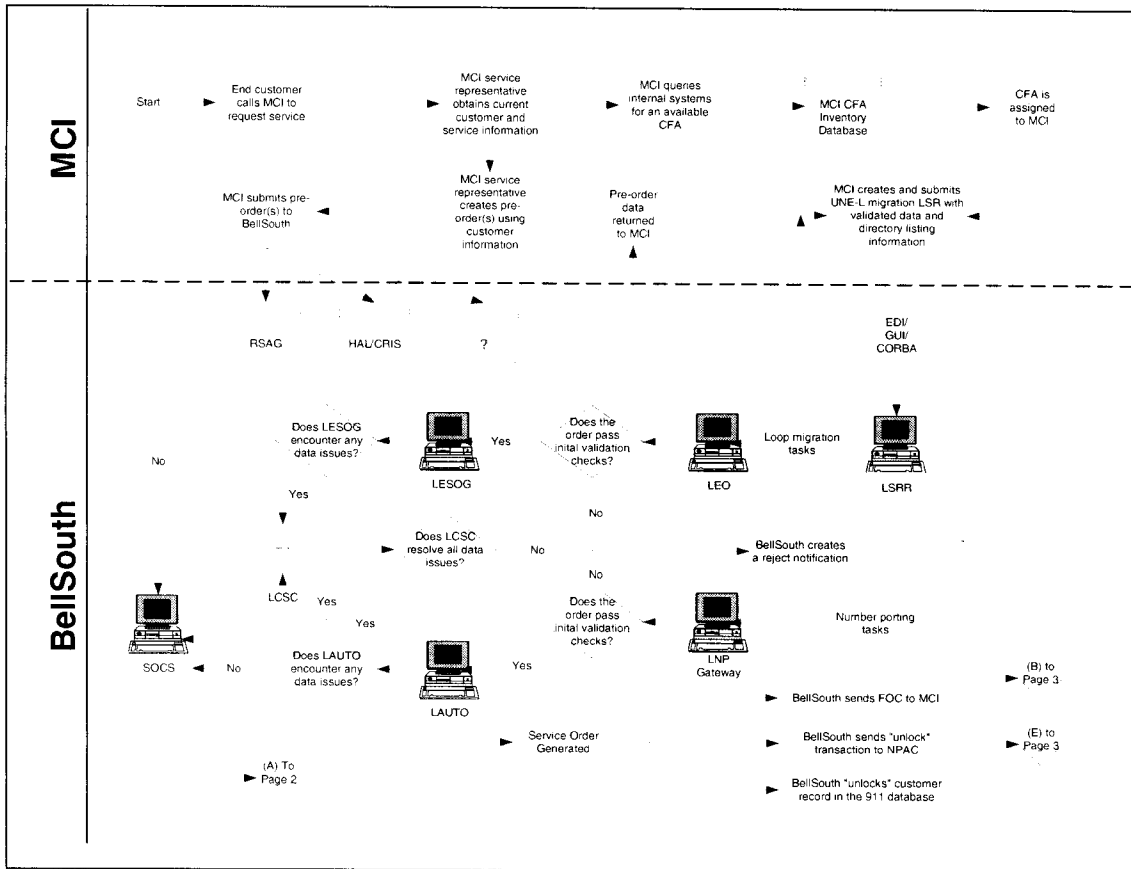
14 A. One of the major issues in this proceeding is whether operational impairment
15 exists. For the reasons I have outlined, and the ones described in MCI's network
16 operational testimony, it clearly does. But determining that operational
17 impairment exists is the easy part of the Authority's job. The more difficult part
18 is working with the industry to ensure that the barriers are removed. I have
19 presented some approaches to known operational problems that should help the
20 Authority and the industry progress toward making UNE-L operationally feasible
21 for CLECs. As these problems and new ones that arise are addressed and
22 remedied, the industry can begin to make UNE-L a reality.

23 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

1 A. Yes, it does.

Retail to UNE-P Migration

- The CLEC issues a single UNE-P local service request (“LSR”) to the ILEC following the prescribed Ordering and Billing Forum (“OBF”) procedures. This LSR is issued using electronic data interface (“EDI”) or the ILEC-provided graphical user interface (“GUI”). The CLEC need only provide the customer’s name and telephone number. Directory listings can remain the same, and service address information and E911 information are not required by the ILEC.
- The ILEC EDI translator checks the order to ensure that key fields are correct and, via the same computer system, returns a Firm Order Confirmation (“FOC”) or an electronic error message (reject or clarification) to the CLEC. The FOC provides the due date for the completion of the programming necessary to complete the order.
- If an error message is issued, the CLEC must resubmit the order, restarting the process.
- The order then electronically “flows through” to the ILEC service order processor, where the internal service orders necessary to make the switch programming changes and billing changes necessary for the migration to UNE-P are generated. Flowthrough ensures that errors are minimized by allowing the service orders to be created mechanically, rather than typed by a service representative. Most ILECs are now achieving well more than 90% flowthrough for standard UNE-P POTS service orders.
- The ILEC internal service orders initiate the internal service order provisioning process, including the implementation of switch feature changes. Migration orders do not require the dispatch of technicians to the frame because the programming changes are made at the switch and can be completed totally electronically. The physical facilities (loop and cross connect) are not changed in any way.
- Once the switch translations work is complete, the internal ILEC systems send the CLEC a Service Order Completion (“SOC”) notifier. At this point, the customer has “migrated” to the CLEC.
- The ILEC completes its internal migration process by updating its internal customer service records (“CSR”) and billing records to stop billing the customer directly and to begin issuing wholesale bills to the CLEC. Some ILECs also send a second notifier, the Billing Completion Notifier, (“BCN”) to the CLEC. This final notifier is generally sent between 1 to 5 days after the internal ILEC billing systems are updated and confirms to the CLEC that the customer has been migrated and billing can begin.



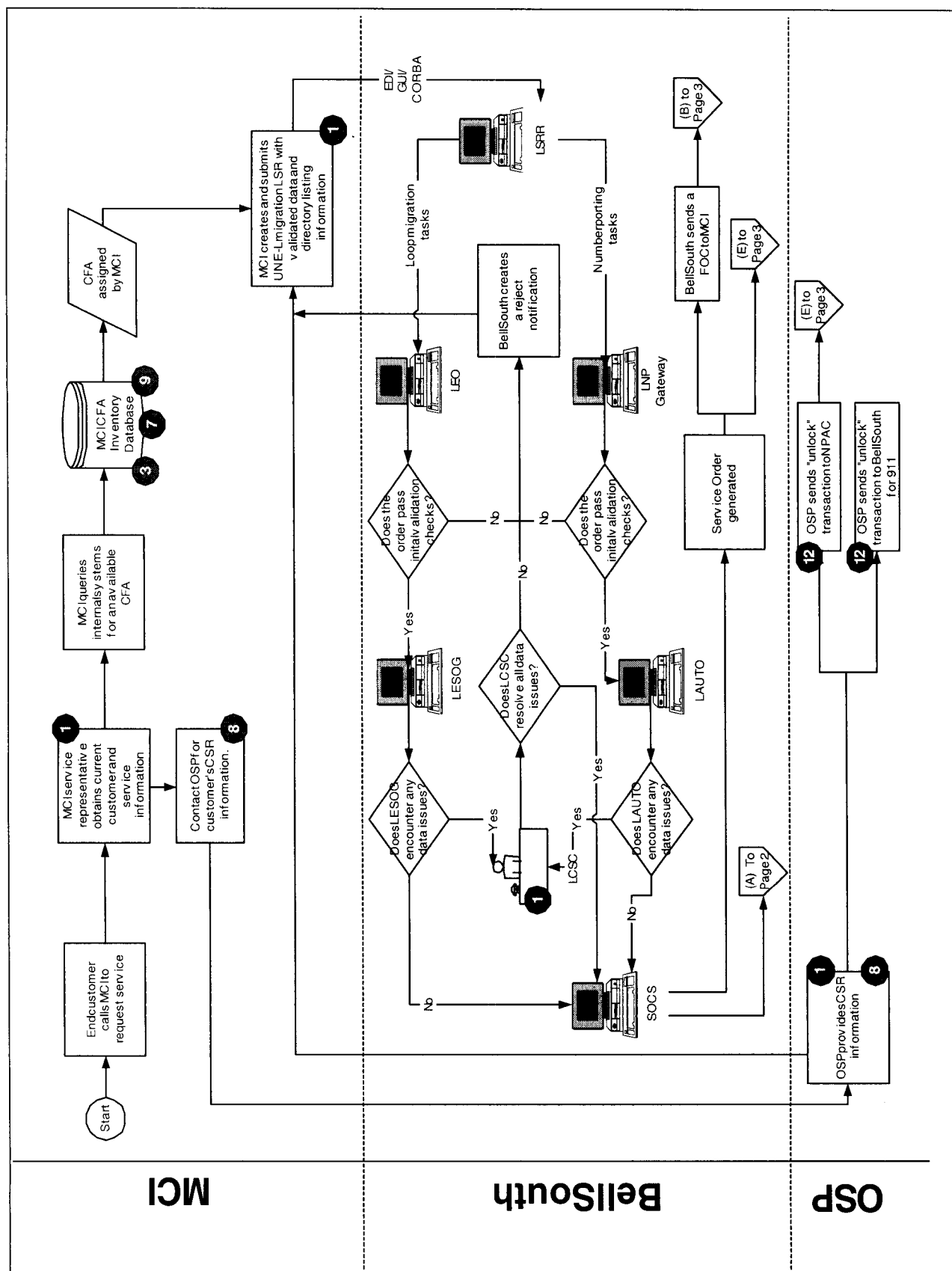
Retail to UNE-L Migration

- The CLEC issues an electronic order to the ILEC requesting that the customer be moved from the ILEC switch to the CLEC switch. Unlike a UNE-P order which requires only the customer's name and telephone number and the features that the customer will be purchasing, the UNE-L order must include the customer's name and telephone number (some companies may require more), and information on the collocation cage to which the loop will be transferred and the channel facility assignment (pair) to which the loop will be terminated.
- The CLEC also will create internal orders to send to the National Number Portability Assignment Center the LIDB provider, and the E911 center serving the customer to establish ownership of the customer's number at the appropriate time. These orders must be timed to coordinate with the orders issued by the ILEC. For example, the ILEC order to unlock the E911 database should be complete prior to the CLEC order to accept responsibility for the record and lock the database. These orders may fall out at any time causing additional customer problems.
- The ILEC EDI translation software will accept or reject the order and return a FOC or clarification/reject to the CLEC. The ILEC service order processor may now be able to create the internal orders necessary to migrate the customer to UNE-L. If it cannot, the orders will need to be entered manually by service center personnel. Fallout rates for UNE-L orders are higher than those for UNE-P. If the order does not flow through the system, the ILEC service order personnel will need to type the orders. Unlike a UNE-P migration, multiple related service orders must be created for a UNE-L transition – generally, the local service center personnel must create a Disconnect (D) order to remove the customer from the ILEC switch; a New (N) order to move the loop from the MDF to the CLEC collocation equipment; and a Change (C) order to change the billing to the CLEC from UNE-P to UNE-L. Directory listing orders may also have to be created, as well as a request to unlock the E911 data base to allow the CLEC to “claim” the customer and a “trigger” order to route calls to the customer via the local number portability data base rather than the ILEC switch.
- The internal ILEC service orders are routed to the technicians responsible for the UNE-L cutover. These technicians must “find” the customer's circuit at the main distribution frame by manually clipping onto the loop and “listening” for dial tone, wire in a jumper cable which will allow the loop to be extended to the CLEC's collocation equipment, and prepare for the cutover. The frame personnel should also check for dial tone at the CLEC end of the collocation, ensuring that the CLEC switch will have dial tone for the customer when he/she migrates.
- On the day of the cut, the ILEC runs the jumper to the CLEC collocation cage and notifies the CLEC that the cut has been made. When the CLEC receives the cut notification, it must complete the local number portability transaction by issuing a “claiming” order to the NPAC. The customer will have dial tone during this

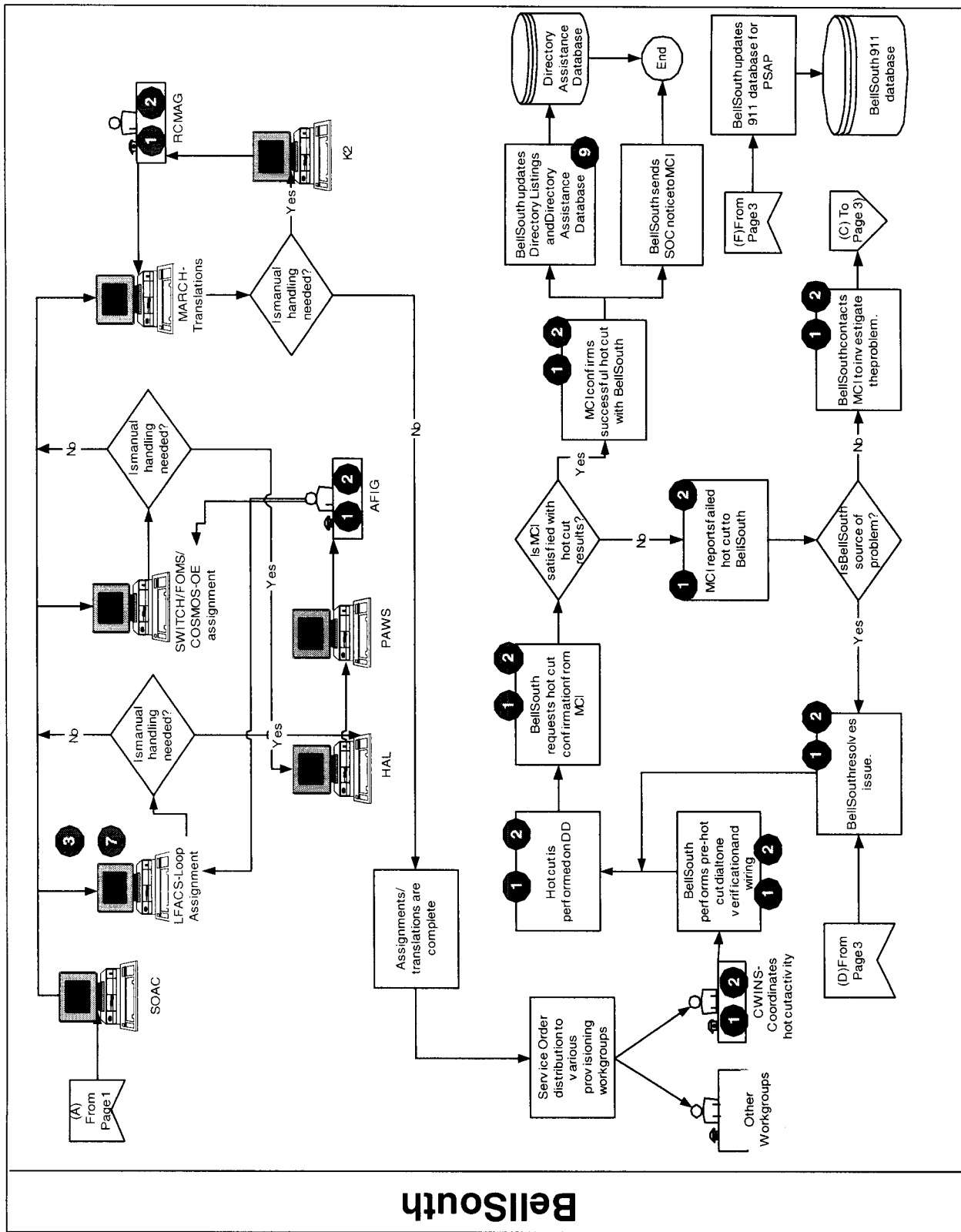
process but will be unable to receive calls until the NPAC transaction is completed.

- The ILEC will issue a service order completion notification to the CLEC.
- The ILEC will complete the internal work required to change the billing to the CLEC from UNE-P to UNE-L. The customer's CSR will be removed from the ILEC systems.

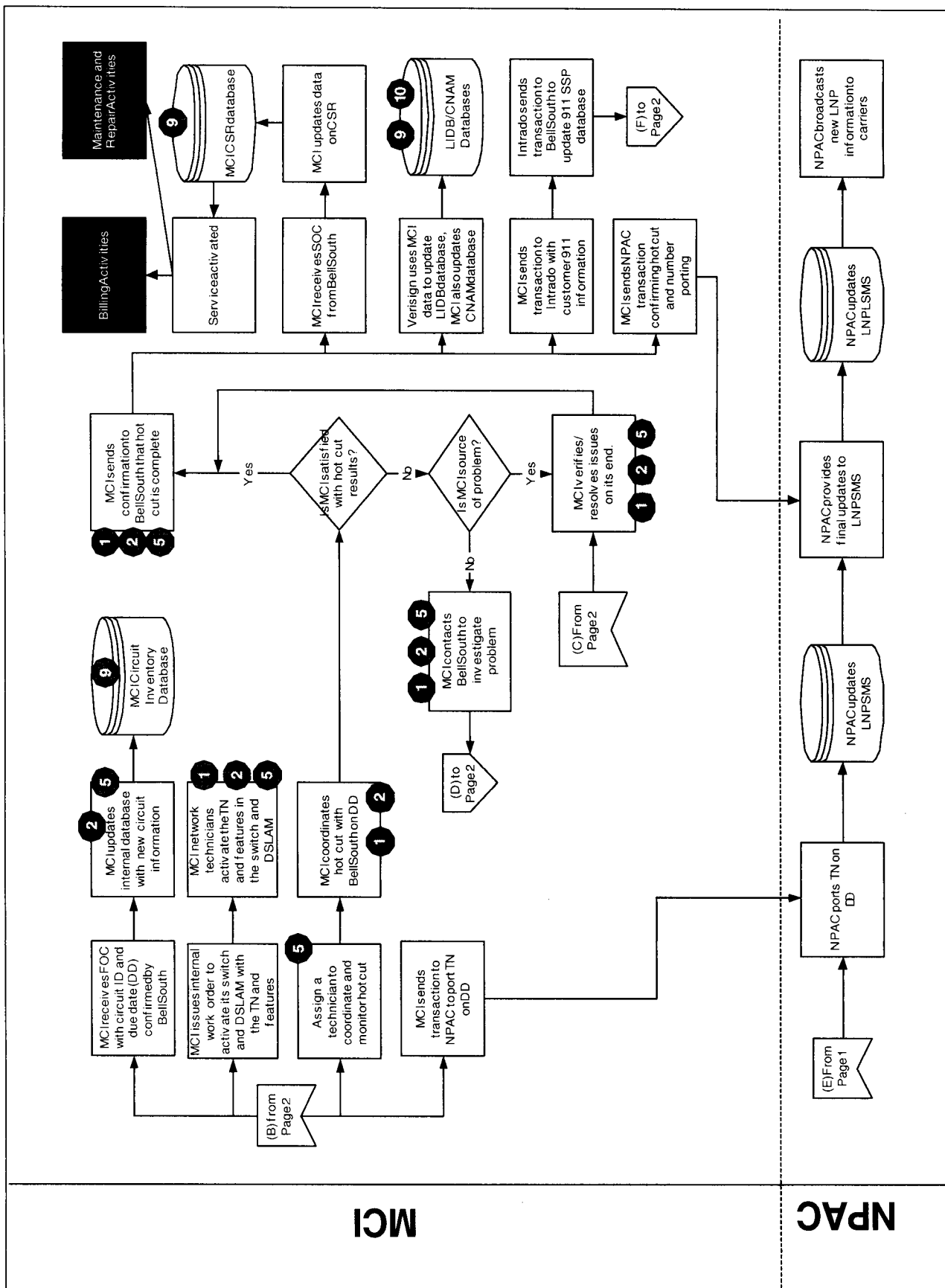
Line-Splitting UNE-P CLEC to MCI UNE-L (Voice and Data) Migration (BellSouth)



BellSouth



Line-Splitting UNE-P CLEC to MCI UNE-L (Voice and Data) Migration (BellSouth)



Assumptions:

- 1) All customers migrating to MCI call into an MCI service center to order service.
- 2) All customers port their numbers.
- 3) MCI switches will provide all MCI UNE-L customer features.
- 4) Customers are not moving to new locations.
- 5) MCI uses a vendor, Intrado, to load 911 records to the PSAP.
- 6) MCI will maintain its own LIDB and CNAM databases. MCI uses a vendor, Verisign, to load LIDB data.
- 7) Scenarios are represented as "ideal" (not necessarily zero-defect): Each party has sufficient resources; each party sufficiently manages its responsibilities; no "one-off" circumstances are involved.
- 8) When translations are performed, BellSouth sets the AIN trigger.
- 9) As part of MCI's agreement with BellSouth, line loss reports will only be generated for loss of lines to other carriers. If MCI is converting customers from one UNE type to another, line loss reports will not be generated.
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- 11) Only processes and systems that directly impact MCI or BellSouth are outlined.
- 12) For migrations involving DSL, voice and data are pre-wired together in MCI's collocation (DSLAM and Splitter), and inventoried and assigned as one assembly with one CFA.

Challenges:

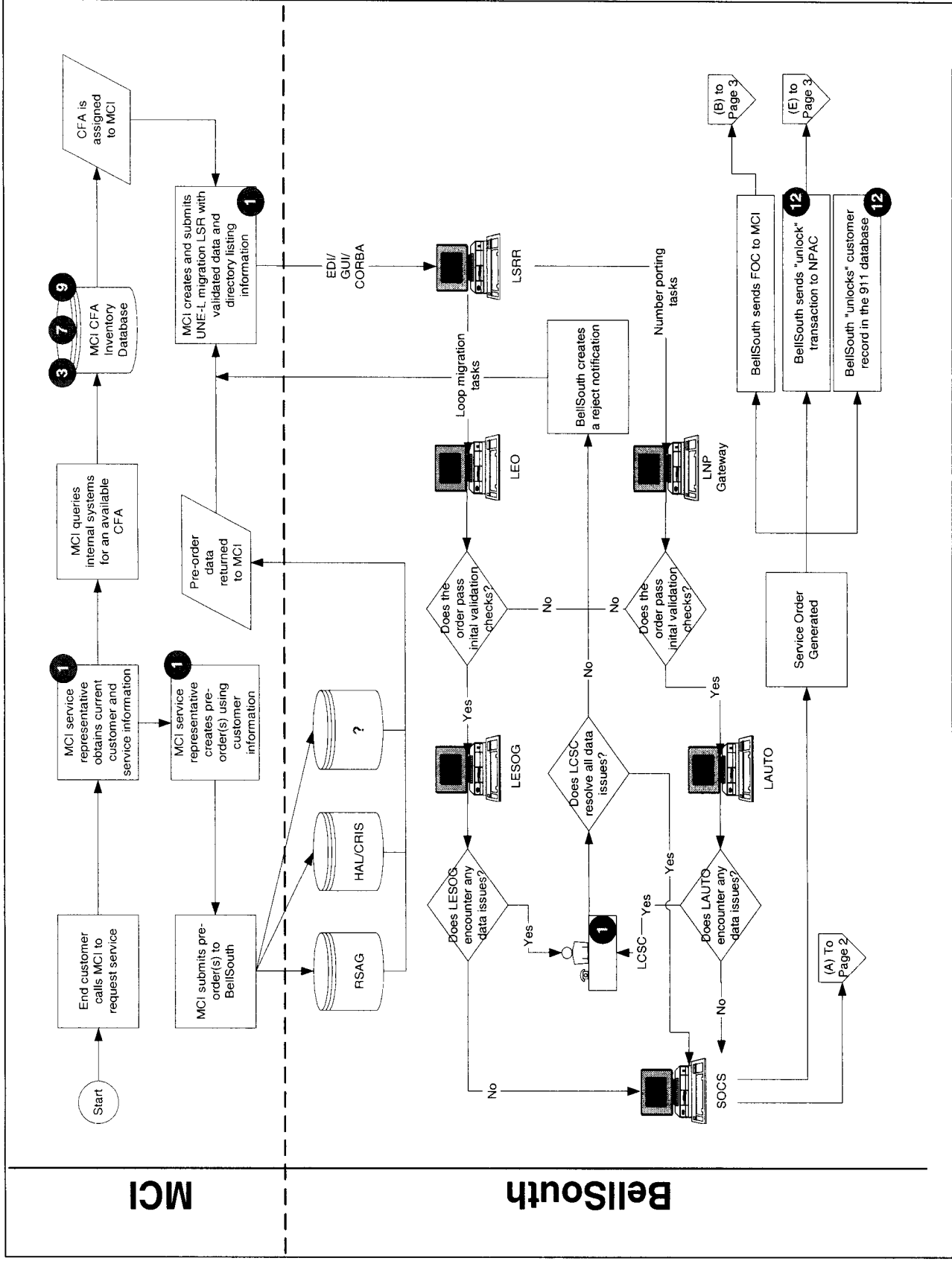
(The following challenges are based on the UNE-L Operational Analysis: Activity Two reports.)

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- 2) Challenges associated with high steady-state provisioning volumes and the impact on systems and processes.
- 3) Challenges associated with facility availability.
- 4) Challenges associated with facility re-use.
- 5) Challenges associated with expanded MCI Provisioning Group responsibilities for UNE-L service.
- 6) Challenges associated with ordering and provisioning when IDLC service is present.
- 7) Challenges associated with data management specifically related to facility assignment and inventory.
- 8) Challenges associated with insufficient CLEC-to-CLEC interfaces and processes.
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ECTA: Electronic Communications Trouble Administration
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SOCS: Service Order Confirmation System
SSP: 911 Service Provider
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TAFI: Trouble Analysis Facilitation Interface
TAG/RoboTag: Telecommunications Access Gateway/Robust TAG

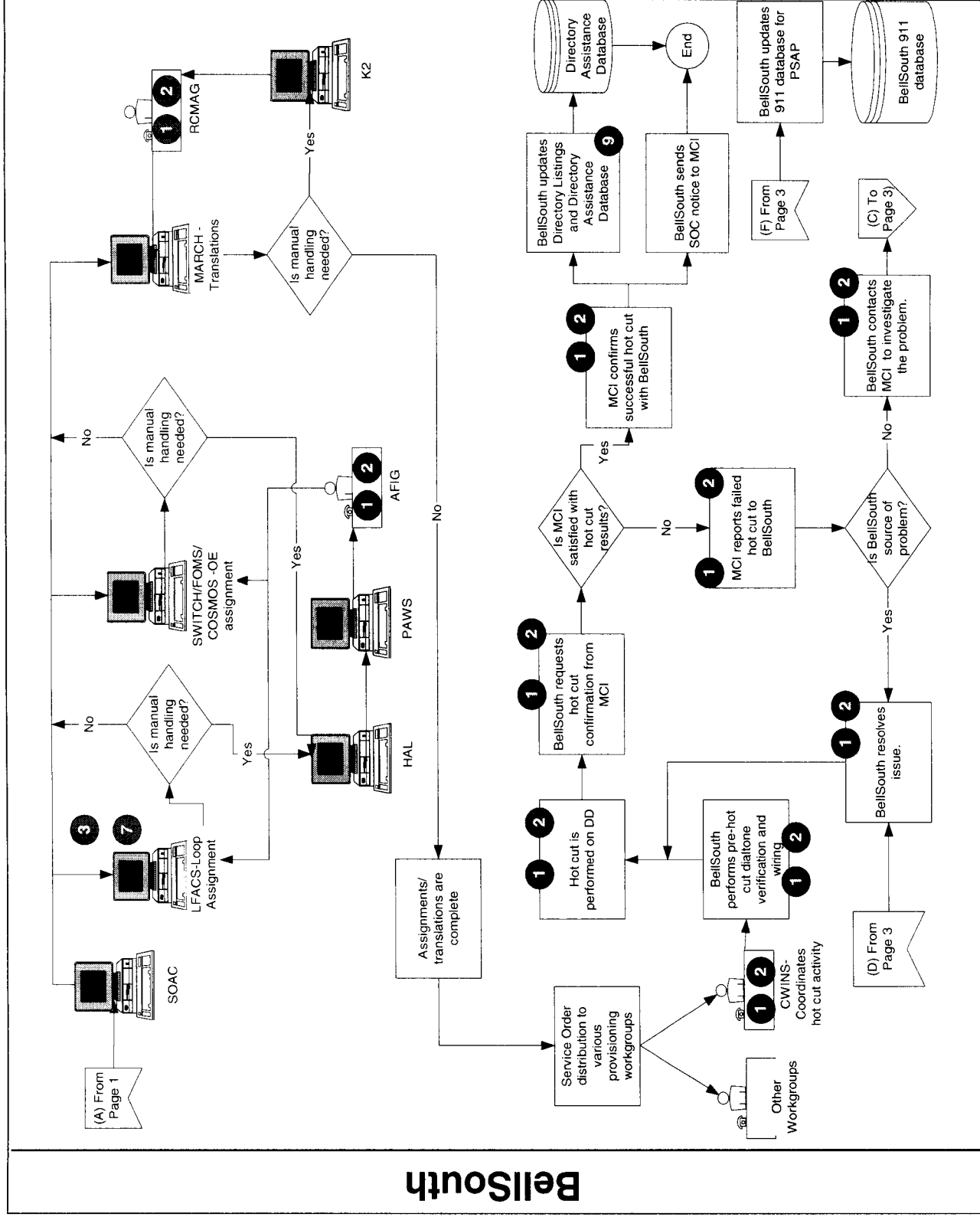
BellSouth Retail DSL-Capable Loop to MCI DSL-Capable Loop Migration



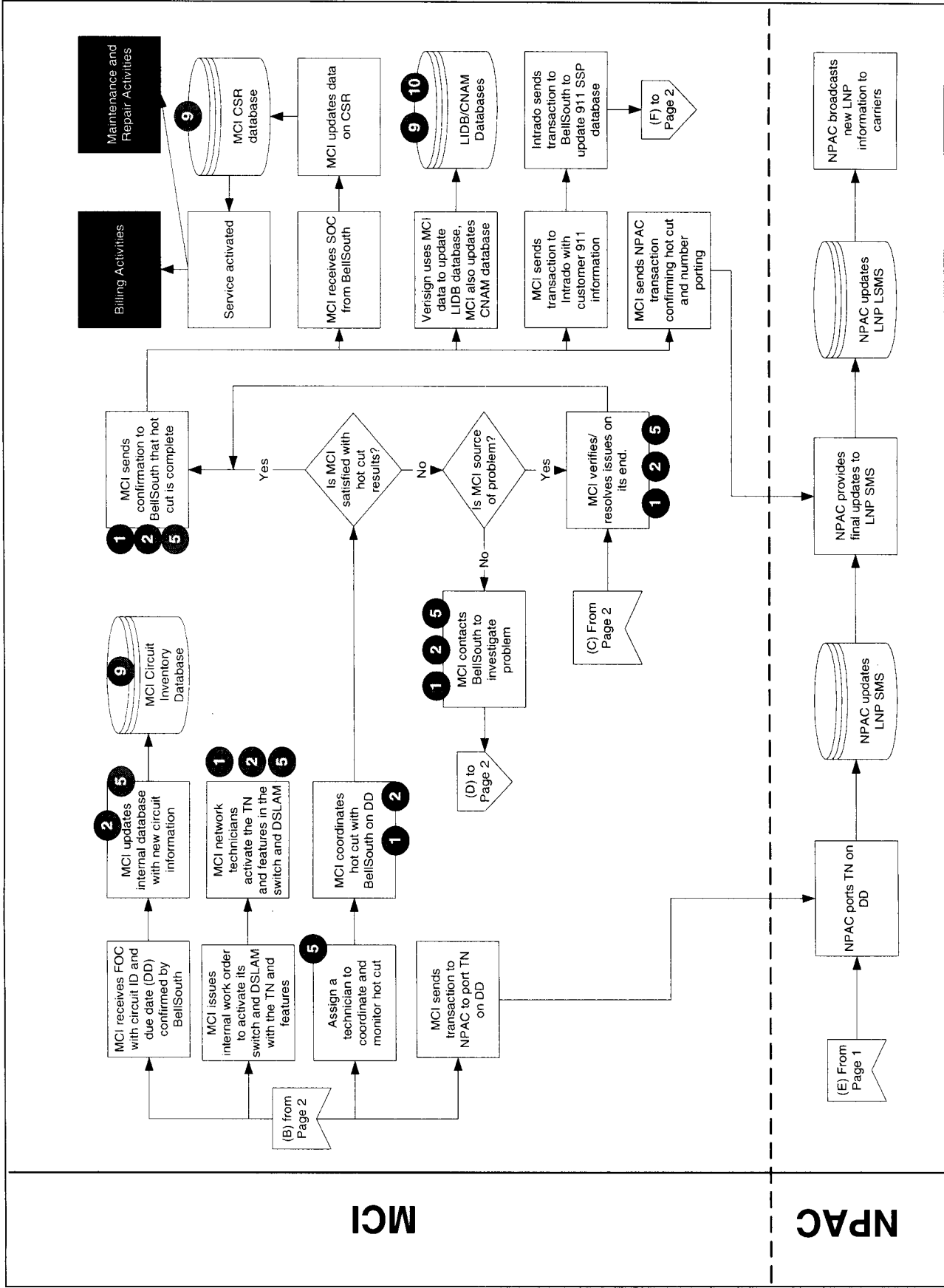
EXHIBIT

52-4

BellSouth Retail DSL-Capable Loop to MCI DSL-Capable Loop Migration



BellSouth Retail DSL-Capable Loop to MCI DSL-Capable Loop Migration



Assumptions:

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- 8) When translations are performed, BellSouth sets the AIN trigger.
- 9) As part of MCI's agreement with BellSouth, line loss reports will only be generated for loss of lines to other carriers. If MCI is converting customers from one UNE type to another, line loss reports will not be generated.
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- 12) For migrations involving DSL, voice and data are pre-wired together in MCI's collocation (DSLAM and Splitter), and inventoried and assigned as one assembly with one CFA.

Challenges:

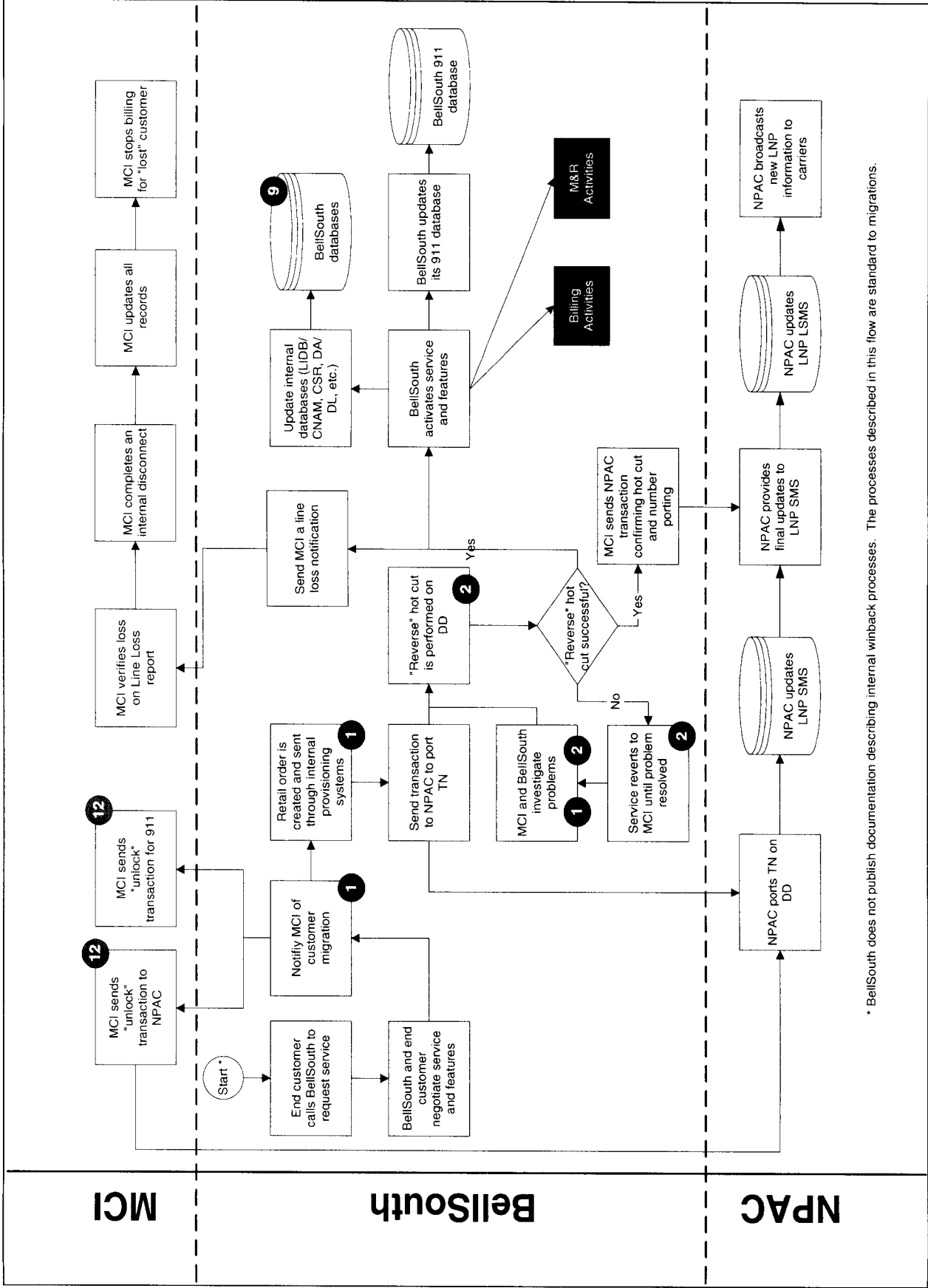
(The following challenges are based on the UNE-L Operational Analysis: Activity Two reports.)

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- 2) Challenges associated with high steady-state provisioning volumes and the impact on systems and processes.
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- 5) Challenges associated with expanded MCI Provisioning Group responsibilities for UNE-L service.
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SSP: 911 Service Provider
SWITCH/FOMS: Frame Operations Management System
TAFI: Trouble Analysis Facilitation Interface
TAG/RoboTag: Telecommunications Access Gateway/Robust TAG

Winback - MCI UNE-L to BellSouth Retail Migration



EXHIBIT

5L-4

Assumptions:

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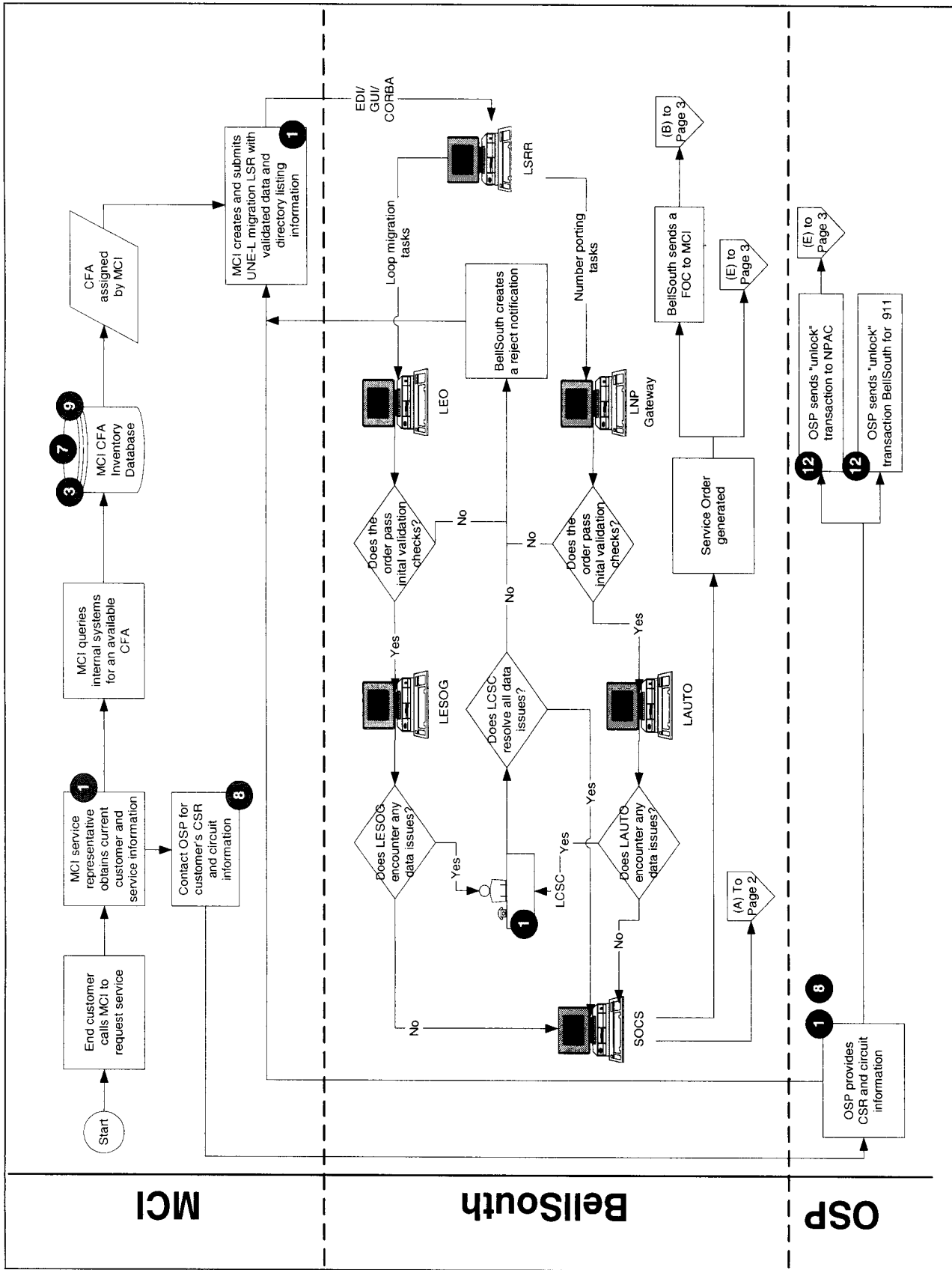
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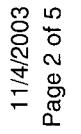
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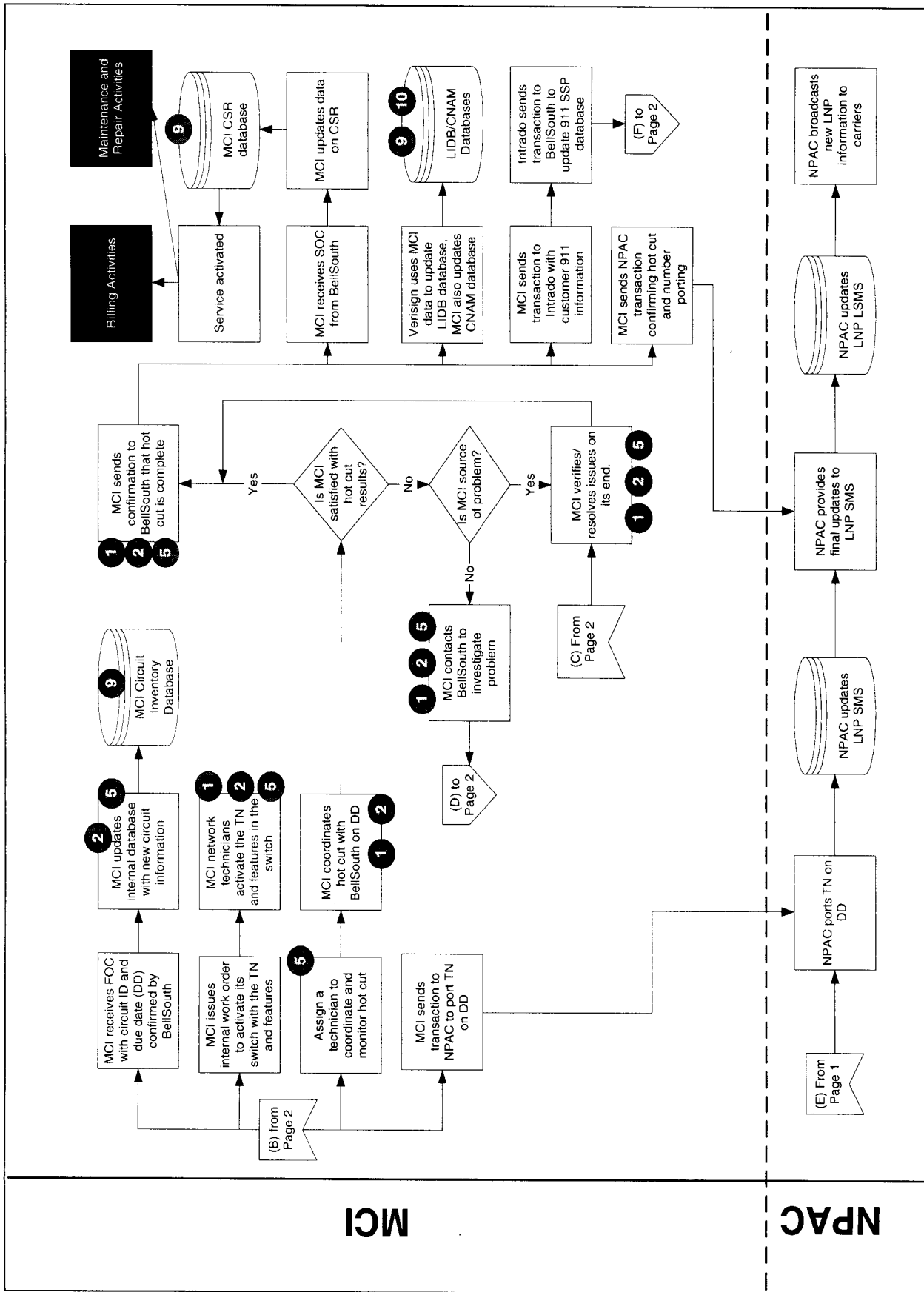
CLEC UNE-L to MCI UNE-L Migration (BellSouth)



BellSouth



CLEC UNE-L to MCI UNE-L Migration (BellSouth)



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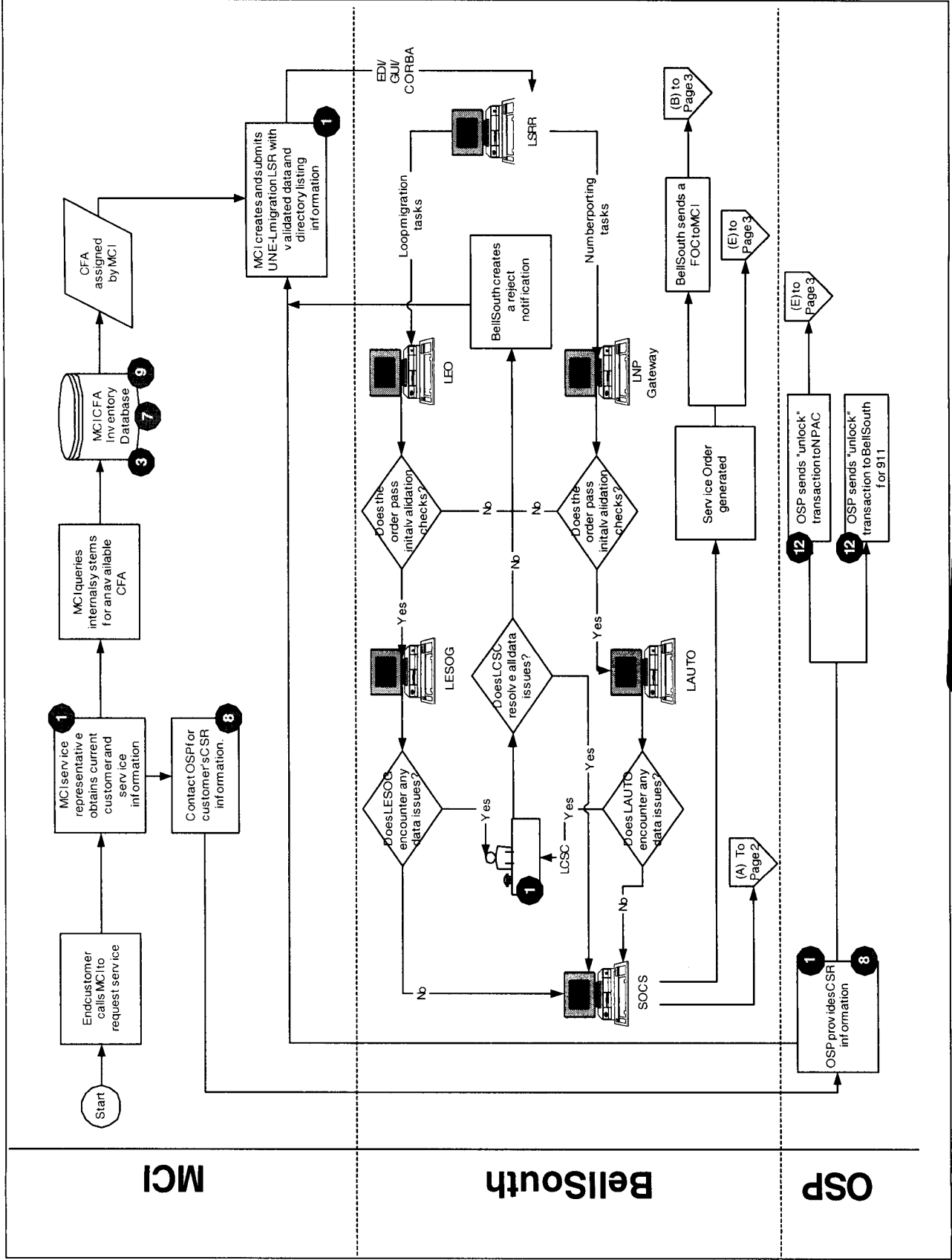
(The following challenges are based on the UNE-L Operational Analysis: Activity Two reports.)

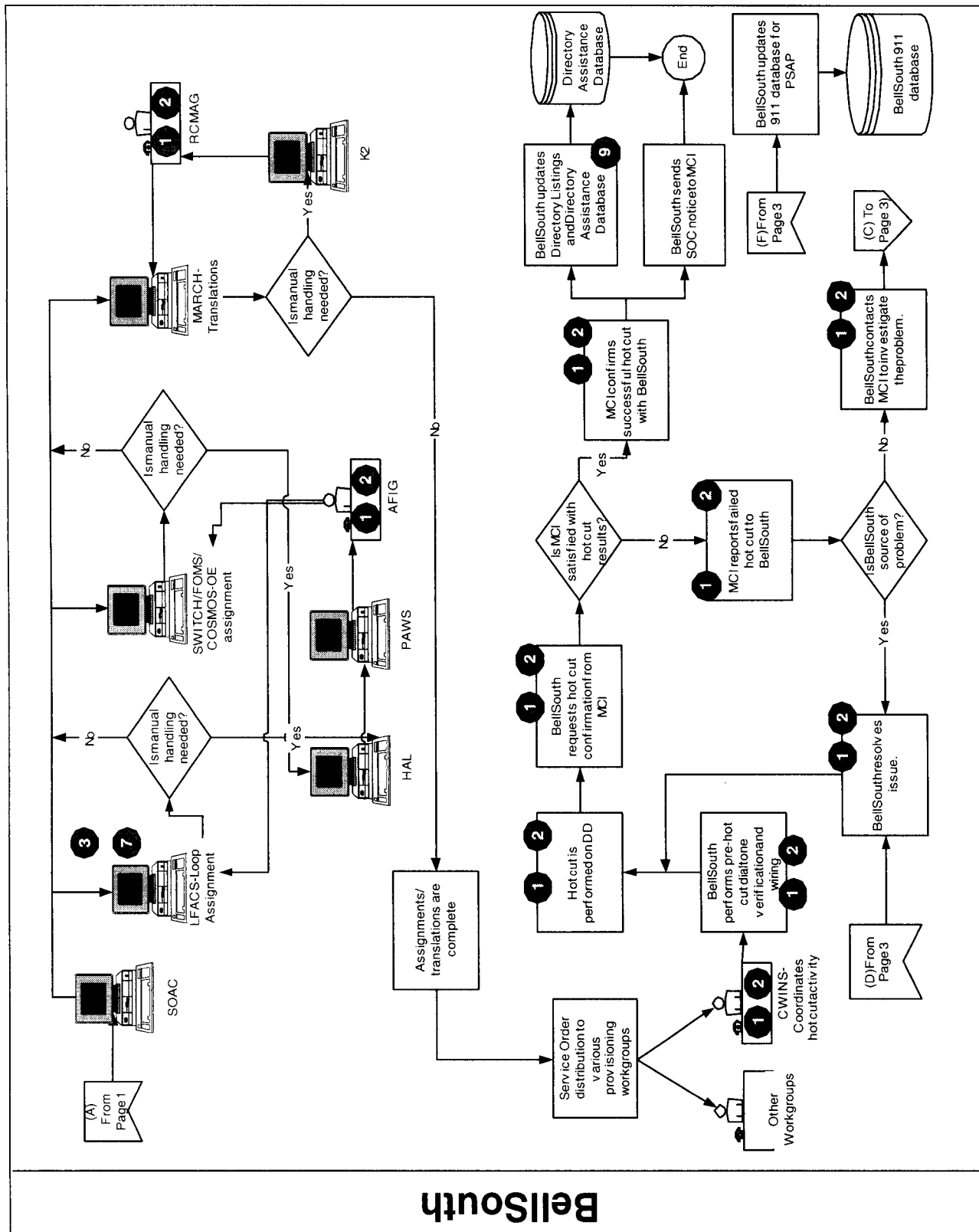
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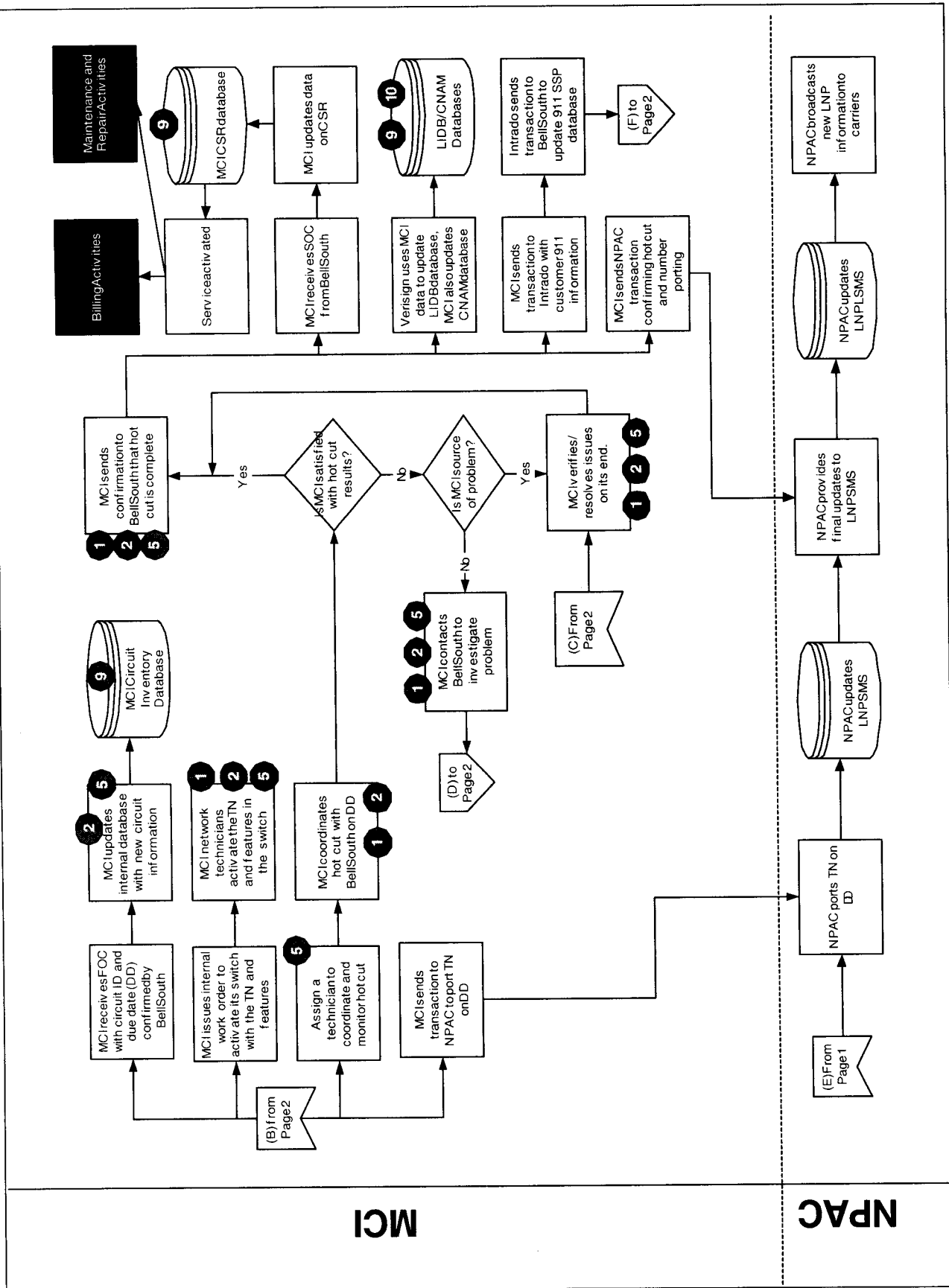
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CLEC UNE-P to MCI UNE-L Migration (BellSouth)





CLEC UNE-P to MCI UNE-L Migration (BellSouth)



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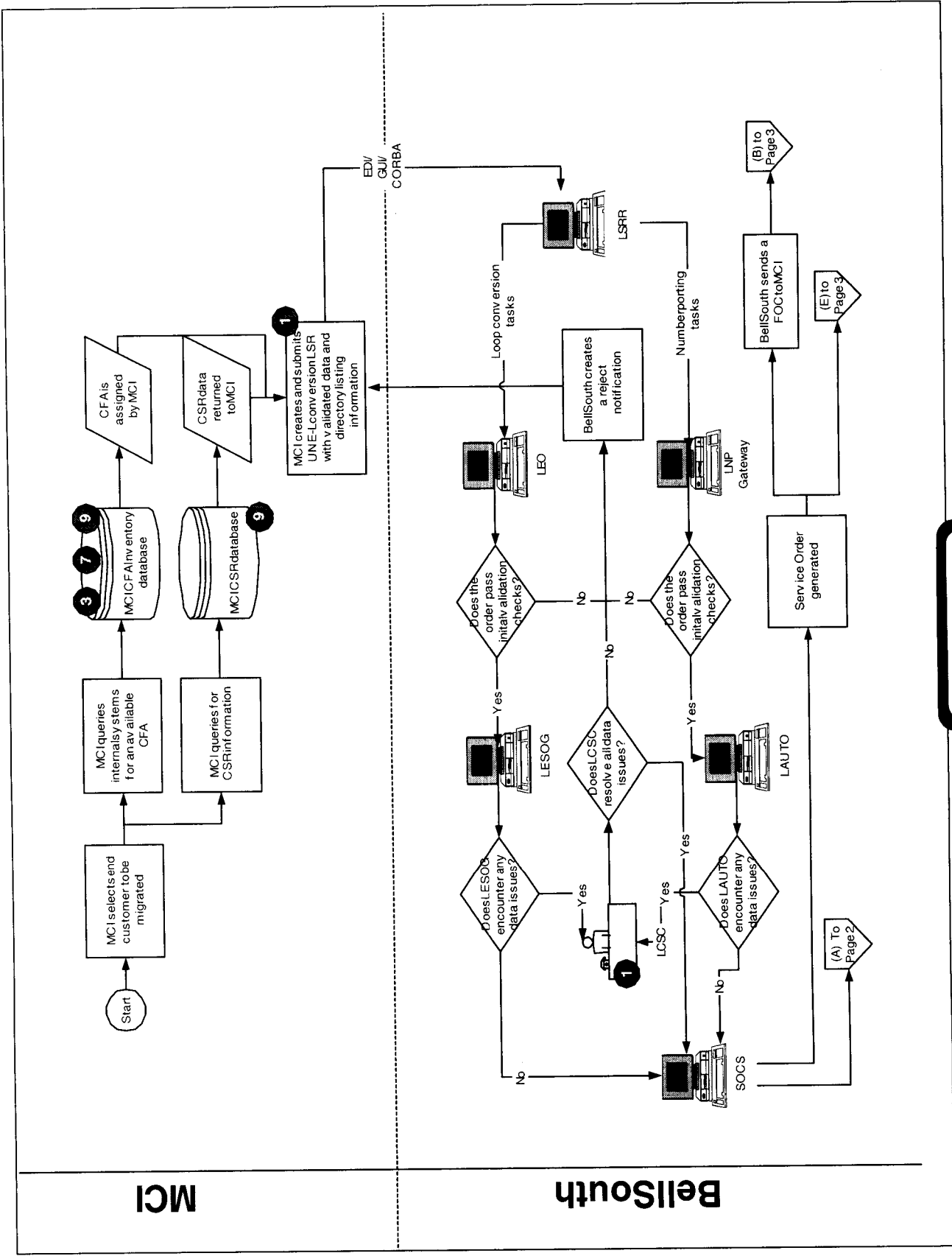
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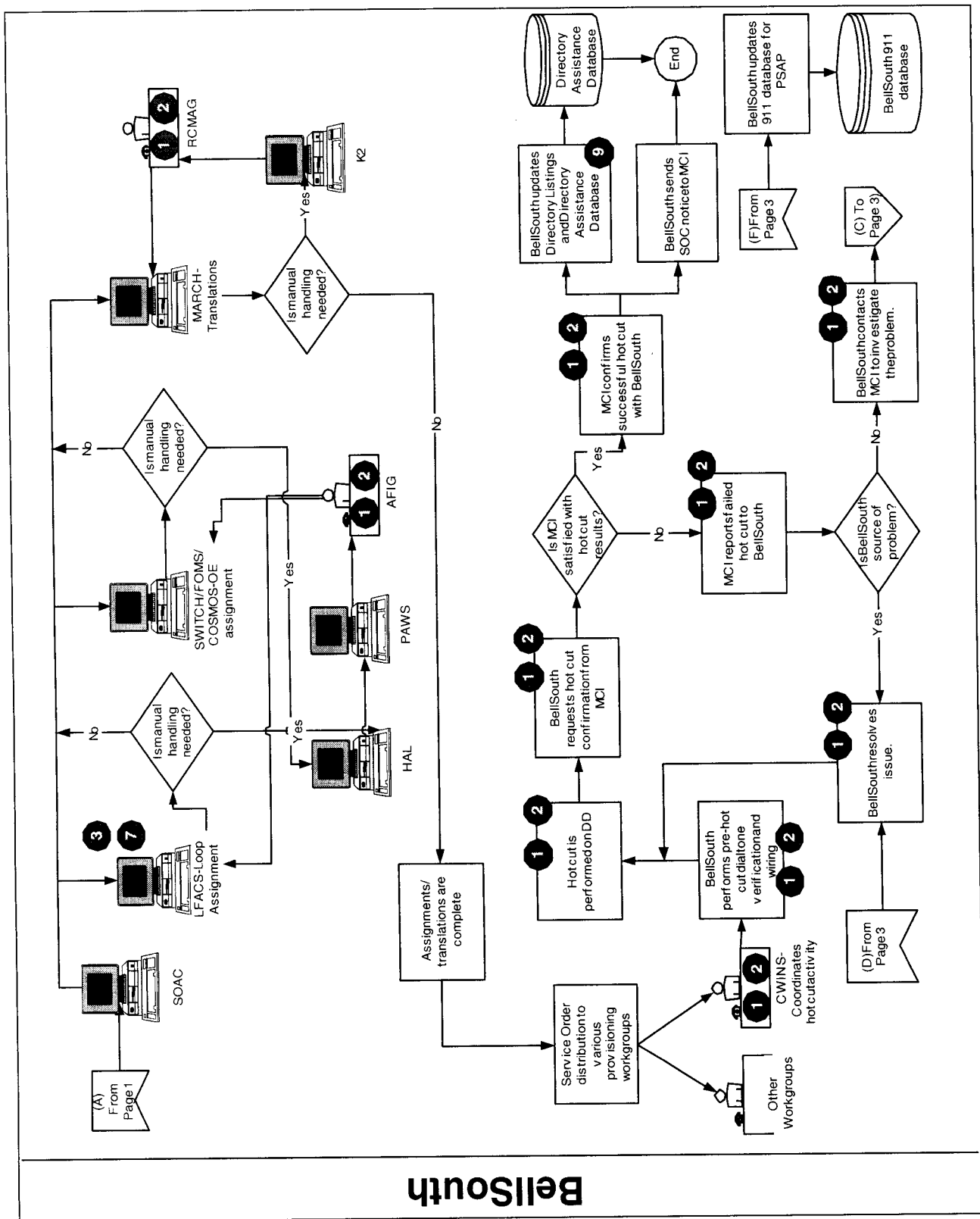
MCI UNE-P to MCI UNE-L Conversion (Individual Customer) (BellSouth)



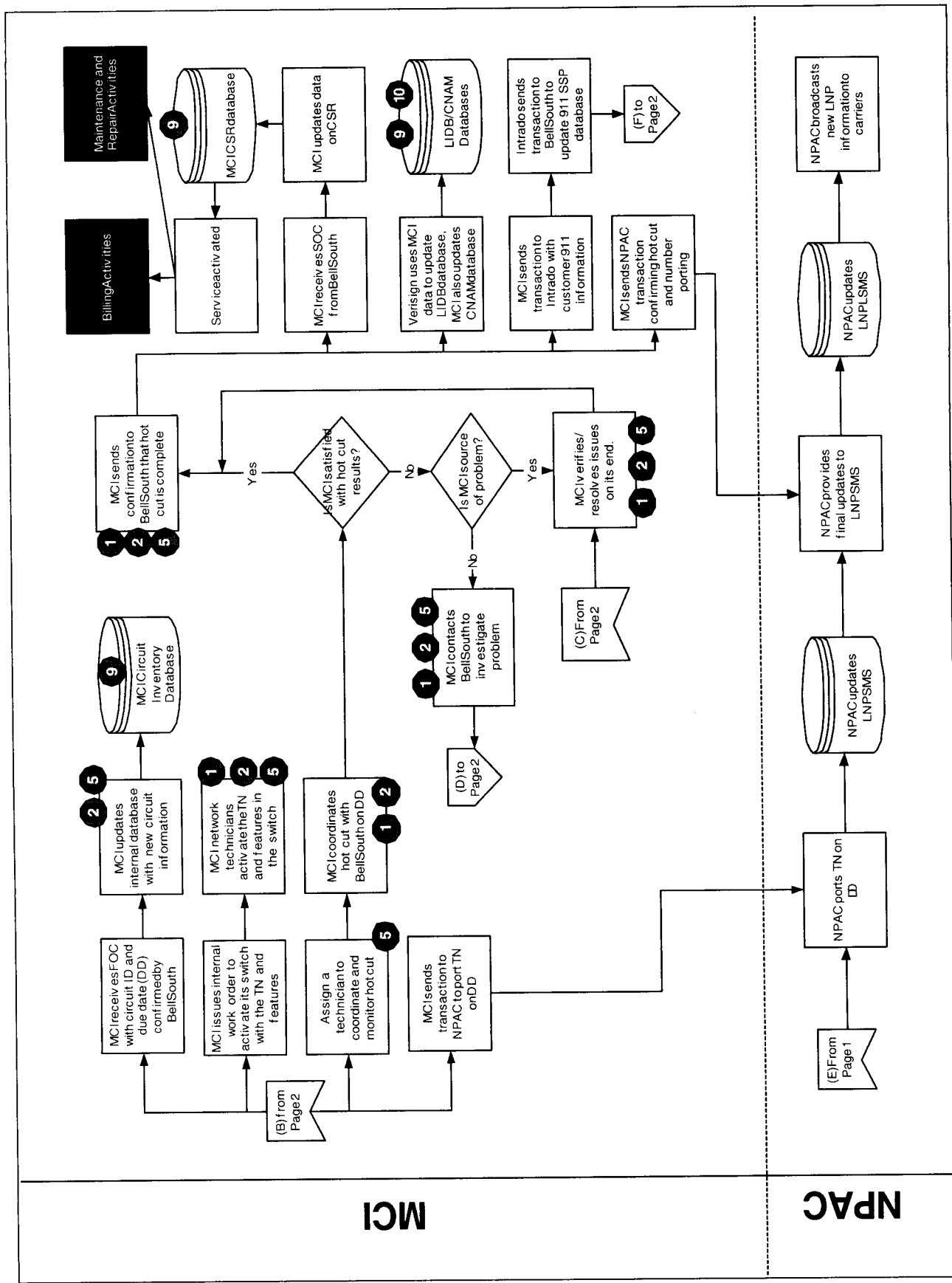
EXHIBIT

52-4

MCI UNE-P to MCI UNE-L Conversion (Individual Customer) (BellSouth)



MCI UNE-P to MCI UNE-L Conversion (Individual Customer) (BellSouth)



Assumptions:

- 1) All customers migrating to MCI call into an MCI service center to order service.
- 2) All customers port their numbers.
- 3) MCI switches will provide all MCI UNE-L customer features.
- 4) Customers are not moving to new locations.
- 5) MCI uses a vendor, Intrado, to load 911 records to the PSAP.
- 6) MCI will maintain its own LIDB and CNAM databases. MCI uses a vendor, Verisign, to load LIDB data.
- 7) Scenarios are represented as "ideal" (not necessarily zero-defect): Each party has sufficient resources; each party sufficiently manages its responsibilities; no "one-off" circumstances are involved.
- 8) When translations are performed, BellSouth sets the AIN trigger.
- 9) As part of MCI's agreement with BellSouth, line loss reports will only be generated for loss of lines to other carriers. If MCI is converting customers from one UNE type to another, line loss reports will not be generated.
- 10) Provisioning flows are based in part on information obtained from the KPMG Consulting BellSouth-Florida OSS Report.
- 11) Only processes and systems that directly impact MCI or BellSouth are outlined.
- 12) For migrations involving DSL, voice and data are pre-wired together in MCI's collocation (DSLAM and Splitter), and inventoried and assigned as one assembly with one CFA.

Challenges:

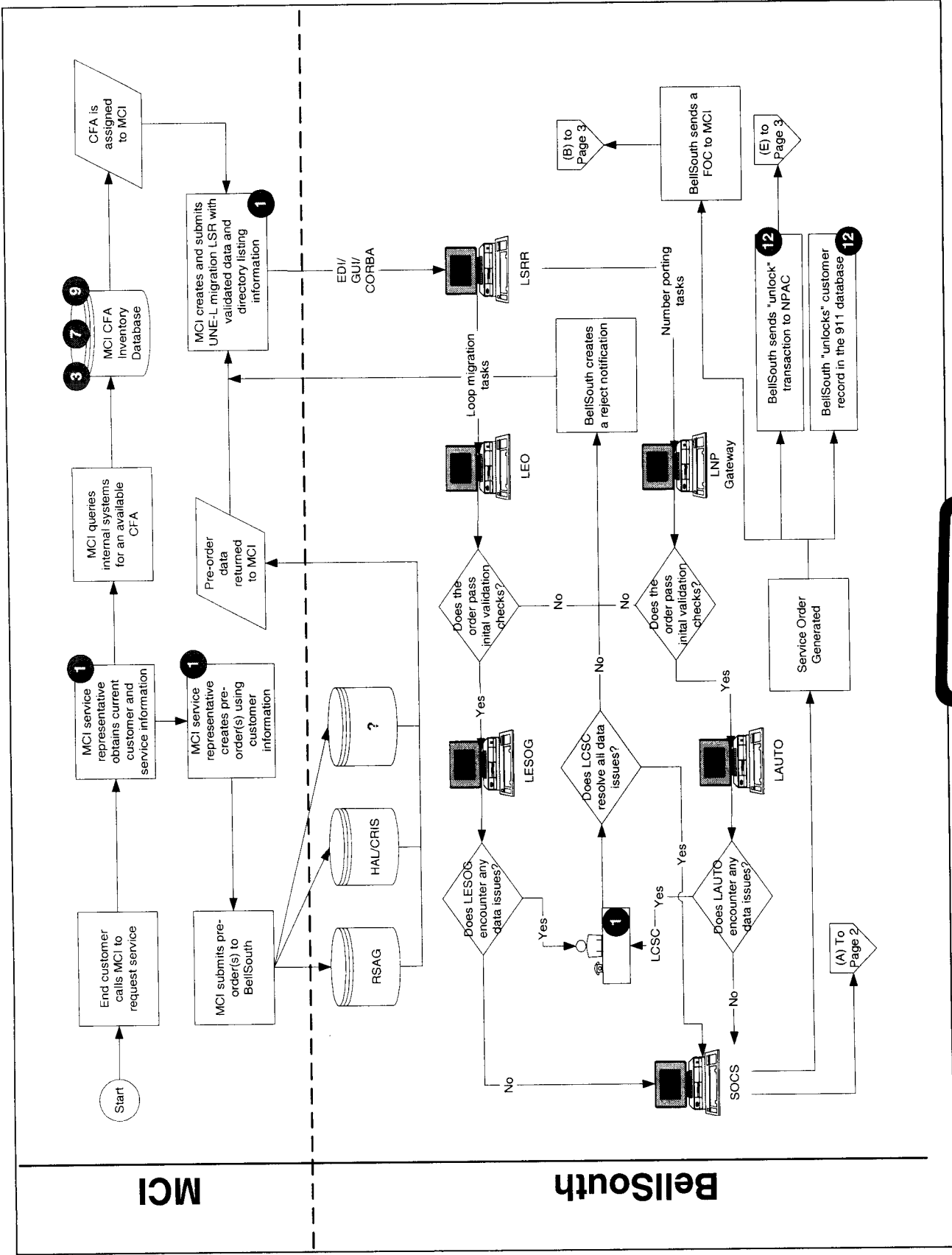
(The following challenges are based on the UNE-L Operational Analysis: Activity Two reports.)

- 1) Challenges associated with manual handling throughout ordering and provisioning processes.
- 2) Challenges associated with high steady-state provisioning volumes and the impact on systems and processes.
- 3) Challenges associated with facility availability.
- 4) Challenges associated with facility re-use.
- 5) Challenges associated with expanded MCI Provisioning Group responsibilities for UNE-L service.
- 6) Challenges associated with ordering and provisioning when IDLC service is present.
- 7) Challenges associated with data management specifically related to facility assignment and inventory.
- 8) Challenges associated with insufficient CLEC-to-CLEC interfaces and processes.
- 9) Challenges associated with data integrity.
- 10) Challenges associated with MCI LIDB/CNAM data management responsibilities.
- 11) Challenges associated with batch migration of customers from UNE-P to UNE-L service.
- 12) Challenges associated with number unlocking procedures for 911 and LNP.

Glossary:

CAFE: Carrier Access Front End
CFA: Connecting Facility Assignment
CNAM: Customer Name Database
CORBA: Common Object Request Broker Architecture ordering interface
CPSS: Circuit Provisioning Status System
CPSS-TA: Circuit Provisioning Status System-Trouble Administration
CSOTS: CLEC Service Order Tracking System
DD: Due date
DSAP: Direct Order Entry (DOE) Support Application
ECTA: Electronic Communications Trouble Administration
FOC: Firm Order Confirmation
GUI: Graphical User Interface
HAL/CRIS: Hands-off Assignment Logic/Customer Record Information System
LAUTO: LNP Automation System
LCSC: Local Carrier Service Center
LFACS: Loop Facility Assignment and Control System
LENS: Local Exchange Navigation System (GUI ordering system)
LEO: Local Exchange Ordering System
LESOG: Local Exchange Service Order Generator
LIDB: Line Information Database
LNP: Line Number Portability
LSMS: BellSouth's LNP database, containing downloads from NPAC's LSMS
LSR: Local Service Request
LSRR: Local Service Request Router
MARCH: Memory Administration Recent Change History
NPAC: Number Portability Administration Center: Manages the LPN process
OE: Office Equipment
OSP: Old Service Provider, also known as the "Losing CLEC"
PAWS: Provisioning Analyst Workstation System provisioning system
PO: Pre-order
PSAP: Public Service Answering Point that receives and dispatches 911 calls
"Reverse" Hot Cut: Hot cut performed when ILEC "wins back" customer from CLEC, and reinstates retail service.
RSAG: Regional Street Address Guide
SMS: Service Management System: NPAC's system containing routing and LNP information
SOAC: Service Order Analysis and Control System
SOC: Service Order Confirmation
SOCS: Service Order Confirmation System
SSP: 911 Service Provider
SWITCH/FOMS: Frame Operations Management System
TAFI: Trouble Analysis Facilitation Interface
TAG/RoboTag: Telecommunications Access Gateway/Robust TAG

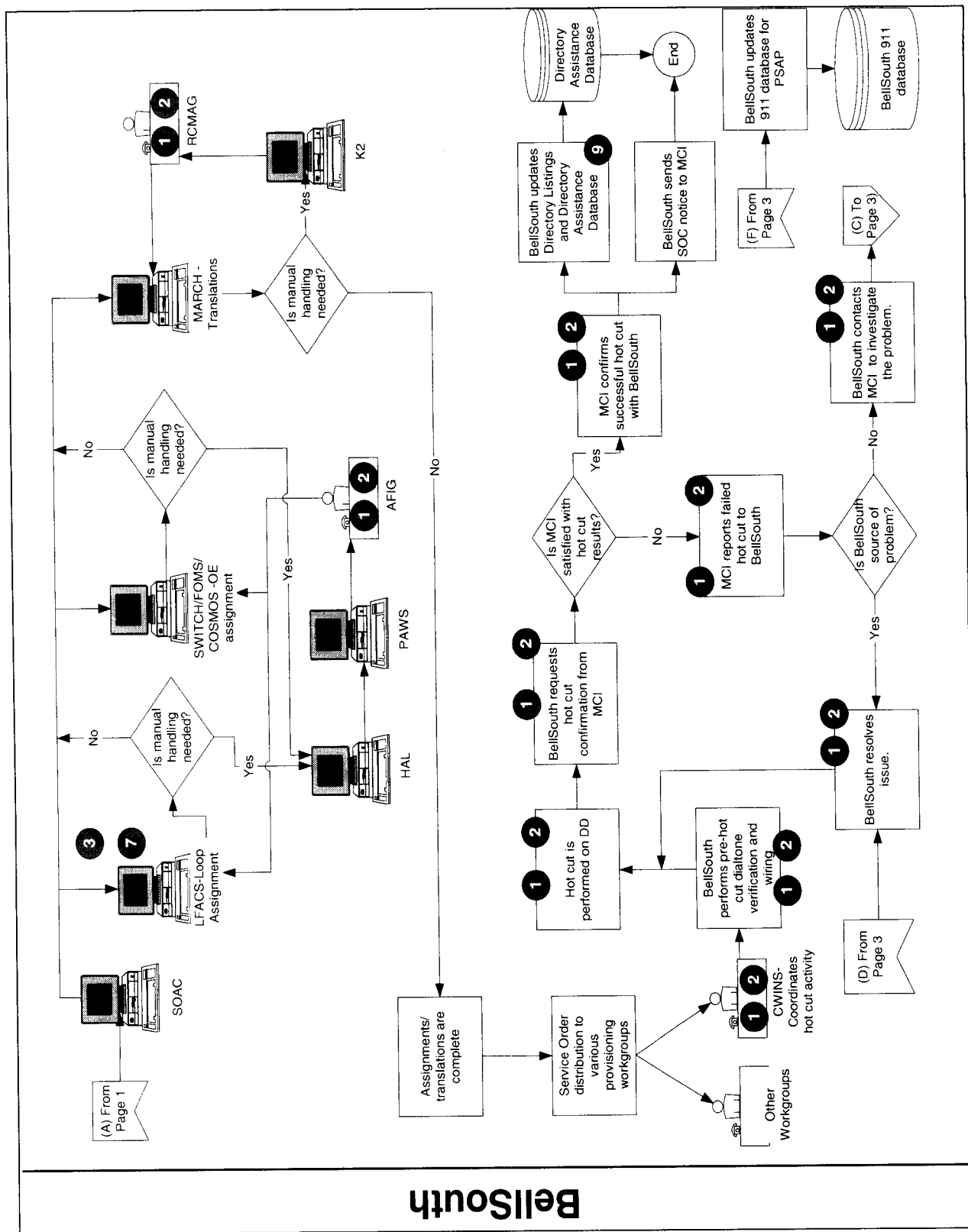
BellSouth Retail to MCI UNE-L Migration



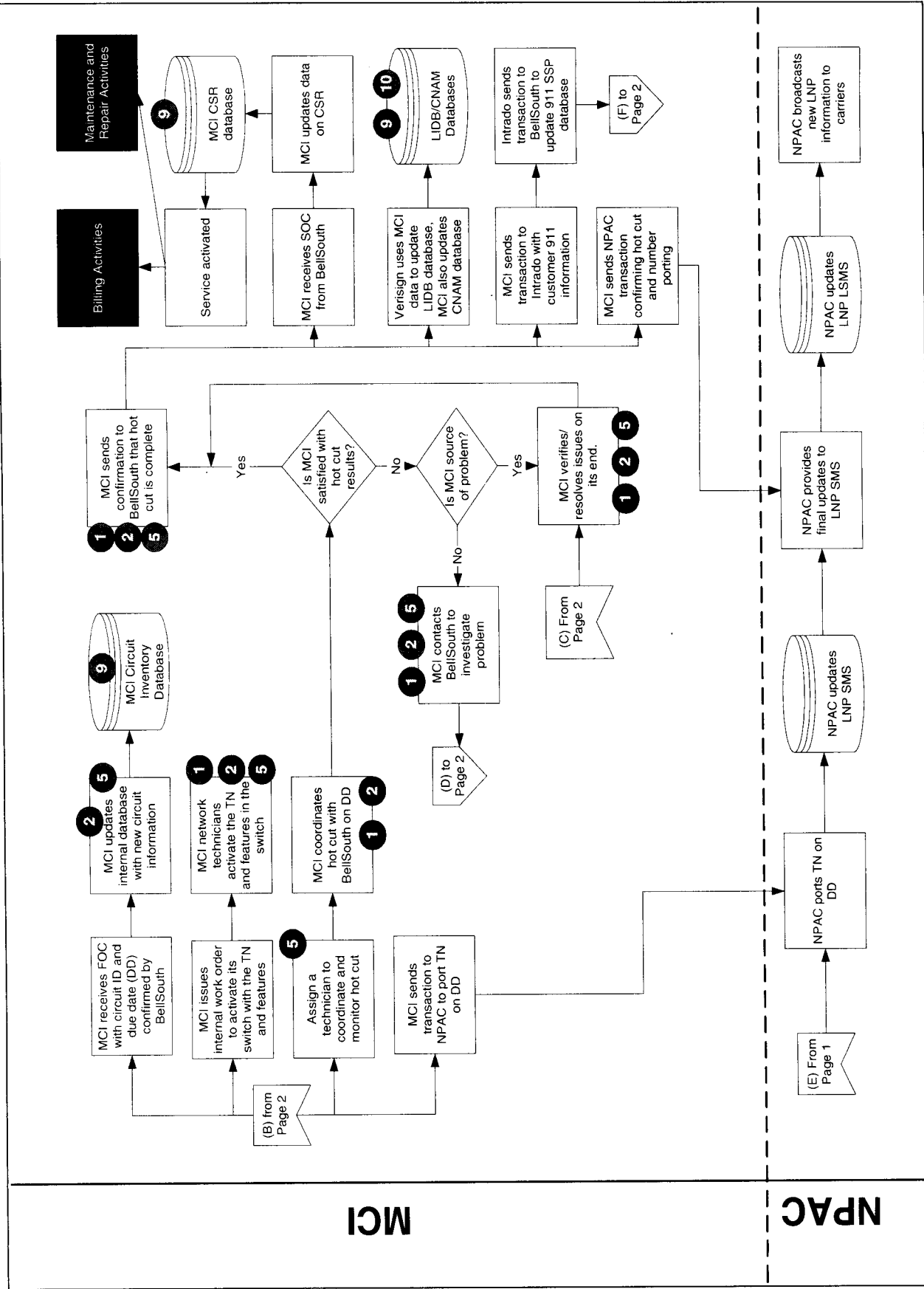
EXHIBIT

52-4

BellSouth Retail to MCI UNE-L Migration



BellSouth Retail to MCI UNE-L Migration



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TAFI: Trouble Analysis Facilitation Interface
TAG/RoboTag: Telecommunications Access Gateway/Robust TAG

-----Original Message-----

From: Change Control [mailto:Change.Control@BELLSOUTH.COM]
Sent: Thursday, November 20, 2003 2:21 PM
To: 80ta; a lee; a vincent; adsl technician; Alan Flanigan; alejandro; Amanda Hill; Annette Cook; Annette Hardy; asanjuan; B Murdo; B Shafer; B Stewart; B Swager; Becky Gorman; Bette Smith; Beverly Posey; Bill Czolba; Bill Gaboriski; Bill Grant; Bill York; Bob Buerrosse; Brenda Gant; Brian Feller; BSNotes; BSTCarrier; C & M; C Ashford; C Cassel; C Chiavatti; C Flanigan; C Larson; C Miller; C Smallwood; C Soptic; Caren Schaffner; Carol Asenjo; Catherine Gray; Cedric Cox; Change Control; Cheryl Acosta; Cheryl Haynes; Chris Iacovelli; Christy Markley; Cindy Schneider; Colette Davis; Colleen Sponseller; Connie Nathan; Craig Davis; D Burt; D Feinberg; D Kane; D Mitchell; D Nathanson; D Parobeck; D Petry; Daddy Max; Dale Donaldson; Darrin McClary; Dave Townsend; David Burley; David Lee; DDL; Denise Berger; Desiree; Don; Donna Poe; E Goldberg; E Singleton; Ed; Elliott Wrann; Erick Melgarejo; Eyu; Gary; Ggotimer; H Carlton; Hawn Nguyen; Heather Thompson; J Britton; J David; J Johnson; J Mclau; J Nugent; J Oliver; J Perry; J T Wilson; J Wilwerding; Jake Hayes; James Childress; Janice Johnson; Jason Bahr; Jason Lee; Jay Bradbury; jean Cherubin; Jeff Walker; Jennifer S; Jerry; Jerry Hill; JG6837; Joanne Baxter; John Boshier; John Duffey; John Fury; Jordana Jureidini; K Branch; K Pollard; K Turner; Karen Grim; Kraig Nielsen; Kyle Kopytchak; L Hopkins; L Looney; L Mitchell; L Ortega; Lacy Hamlin; Launch Now; Leon Bowles; Linda Minasola; Louis Toyama; Lorna Richards; Lorraine Watson; Louise Wilds; M Boner; M Connolly; M Dossey; M Mathews; Margaret Ring; Maria Aquino; Mark; Mark Ozanick; Mary Conquest; Maya Mistry; Mel Wagner; Mer; Michael Britt; Michael Dekorte; Micki Jones; Midge Houghtaling; Mike Young; Mnoshay; Morgan Halliday; N Dreier; Nancy Thompson; Natalie Franklin; Neustar; Nicole Crauwels; Notifications (Ernest Group); One Point; OSS; P Barker; P Kinghorn; P McKay; P Pinick; Patricia D; Peggy Rehm; Peggy Rubino; Phil Nixon; Pmcole; R Bennett; R Breckin; R Cairnes; R Harsila; R Maimon; R Munn; R Wilson; Rae Couvillion; Rebecca Baldwin; Regina McDay; Rick Williams; Robert; Robert Scordato; Ron Johnson; Ross Martin; Rubye; S Cogburn; S Sarem; Sandra Hendricks; Sandra Kahl; Schula Hobbs; Scott Emener; Scott Harper; Scottme; Sharon Eleazer; Sherry Lichtenberg; Steve Brown; Steve Moore; Steve Taff; Susan Sherfey; T Aziz; T Barton; T Carter; T Fry; T Norvell; T Wimmerstedt; TagTeam; Tim; Todd; Todd Sorice; Tom Hyde; Toni; Tonyam; TS1336; Tyra Hush; W Fletcher; Walter Carnes; Wendy Hernandez

Subject: BellSouth Response to Question re: Bulk Migration Collaborative

CLECs,

In response to the question from Benni Almas (Neustar) regarding BellSouth's plans to establish a Bulk Migration collaborative with the CLEC community:

BellSouth has an effective, seamless Bulk Migration process in place. Consequently, BellSouth has no plans to establish a Bulk Migration collaborative at this time.

If this changes in the future, CCP will forward the invitation to the CLEC community.

Thanks,

Change Management Team

"The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential, proprietary, and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and delete the material from all computers.60"