## INTERACTIVE SERVICES ASSOCIATION

**Interest:** Association of interactive service providers, many of whom are actively involved in the 900 pay-per-call industry

**Importance of number portability:**

Portability enables consumers to make meaningful choices, allows greater personal mobility, and fosters competition (2).

**900 service provider portability:**

900 portability will benefit pay-per-call consumers (2). Number identity is a significant consideration for many 900 subscribers (3). ISA does not know the costs of a 900 portability solution, but anticipates that equipment vendors and LECs will participate in this proceeding. ISA will analyze the record an respond more fully on reply.

## JONES INTERCABLE

**Interest:** Cable company; potential competitive local service provider

**Importance of number portability:**

Substantial public benefits would result from service provider, service, and location portability, but comments are limited to service provider portability (2 n.2).

**The FCC's role in number portability:**

A strong FCC role is needed to overcome the LECs' economic motivations (2-3). The Commission should propose specific rules mandating that permanent service provider portability be implemented on a defined and prompt schedule (3).

**Interim measures regarding number portability:**

Interim number portability has serious problems, but should require all incumbent LECs to make all technically feasible forms of interim portability available (4). Without such a requirement, the LECs will delay competition until a permanent solution is mandated (4-5). At least initially, interim number portability should be made available on a "bill and keep" basis -- neither the LEC nor the new entrant would charge the other carrier for allowing a customer to switch (5).

## DAVID L. KAHN

**Interest:** Owner or controller of several 900 information provider or service bureau companies

**900 service provider portability:**

AT&T exerts substantial power over 900 information providers (IPs) because of its economic power, its 70% market share of the national 900 market, and its ability to destroy any information provider's business by terminating without cause, upon thirty days notice, 900 billing services and simultaneously terminating the existing 900 number (2-3). 900 service provider portability should be made fully effective as soon as possible because of continuing anticompetitive evils caused by AT&T's illegal "tying" of their 900 MultiQuest billing services for a particular 900 number to AT&T's transport services for the same 900 number (3). This issue is of great concern to IPs whose 900 numbers are typically the single most important asset they possess, and typically generate virtually all of the IP's 900 income, because of good will and a significant investment in advertising over many years (22-23).

After termination of billing services on a 900 number by either party, AT&T refuses to provide service on that number to the IP (5-6, 10). This use of that number constitutes an illegal tying and exclusive dealing provision (6-9). This problem is exacerbated when AT&T terminates service on thirty days notice without cause, which it has done consistently for more than six years (3. 10-11).

Whether AT&T terminates service without cause, or the IP terminates service to take advantage of preferred service from a competitor, the condition of losing a telephone number in the process is such an economically prohibitive penalty as to be equivalent to a denial of services (11-14). Although the provision of 900 transmission services, including the assignment of 900 telephone services, are basic services subject to the provisions of the Communications Act, and AT&T is required under its tariff to provide 900 tariffed transport services to the IP, there is no provision under that tariff which permits AT&T to change an IP's 900 telephone number simply because it terminates, or AT&T terminates, without cause, billing services (14-16). Although the tariff provides that a customer has no "interest or proprietary right to any ... 900 telephone number," such provisions have been struck down by the FCC and, in any event, AT&T is required by statute to act in a "just and reasonable" manner and termination without cause is not "just and reasonable" (16-22).

**Other:**

Attachment: "Declaration under penalty of perjury of David L. Kahn in support of his comments"

Exhibit A: Defendant AT&T's Opposition to MRO's Motion for Preliminary Injunction from MRO Communications, Inc v. AT&T Corp.

Exhibit B: MRO's Reply Memorandum in Support of Its Motion for an Order Pursuant to Section 406 of the Federal Communications Act

Exhibit C: Letter from Avis Prus, Presale Manager, AT&T Multiquest Action Center to David Kahn, dated September 7, 1995 re: Termination of Biller Services Agreement No. 111448QJ

Exhibit D: AT&T Billing Services Agreement with MRO Communications, Inc.

Exhibit E: Articles: "900 Industry Revenues", "The 900 Cash Flow Is Back," and "900 Services: US Pay Per Call Market"

## MARION COUNTY, FLORIDA, 911 SYSTEM SUPPORT DEPARTMENT

**Interest:** Public safety agency.

**Long-term solutions regarding number portability:**

In developing a long-term solution, the FCC must consider the following issues regarding the relationship between number portability and 911 service: (1) the data base look ups required by number portability will increase call processing time, thereby delaying any emergency response; (2) number portability will force local governments to upgrade their E-911 systems, including perhaps buying new computer terminals and more carefully monitoring number data bases; (3) the concept of "one person, one telephone number" will inevitably complicate the ability of PSAPs to determine the location of a 911 caller; and (4) number portability, with its multiple data bases, will compromise the ability of 911 providers to maintain current information (1-2).

## MCI AND MCIMETRO

**Interest:** IXC, competitive local service provider

**Importance of number portability:**

**Service provider number portability:**

Service provider portability is critical to the success of local competition, as evidenced by a Gallup poll indicating that a large majority of customers would be unlikely to change local service providers if they also had to change telephone numbers (2-3). Number churn cannot and does not provide opportunities for competing carriers to enter the local exchange market, given that the incumbent LEC is the only entity privy to the moving customer's new location, and decides whether the customer can keep his number (4-5).

Service provider also portability is important to the development of wireless-wireless and wireline-wireless competition. Despite technical obstacles (*e.g.*, the reprogramming of customer equipment), such portability should be required for wireless services (3-4).

**Location portability:**

Large scale (*i.e.*, beyond a wire center area) location portability is neither feasible nor desirable because it may cause an inter-regional numbering imbalance as the population shifts, and will break the link between a number and a geographical location (23-24).

**The FCC's role in number portability:**

Market forces alone will not drive the development of number portability. Therefore regulatory intervention is necessary (6). The FCC should take the following actions regarding service provider portability: (1) find the concept to be in the public interest; and (2) encourage state regulators to make a decision on implementation within one year of the release of the Commission's order in this proceeding (6). The FCC should *not* select the technical model or mandate a uniform nationwide solution, but should allow state regulators and local market circumstances to determine which solution should be used in each state, within the constraints of broad guidelines issued by the FCC (6-7, 8-9). A nationwide solution to provider portability is impractical because of the size of the required data base. Rather, each state should be allowed to determine the geographic scope of provider portability within its borders (18-19).

Although the INC has greatly contributed to the development of provider portability, it is unlikely to endorse a particular plan. Therefore, technical and performance standards should be referred to the appropriate T1 standards committee functioning under ATIS (10).

**Long-term solutions regarding number portability:**

Any long-term plan should comport with the following guidelines: (1) portability must be transparent to the user -- there must be no loss of quality or functionality; (2) existing network infrastructure must be used to the extent technically and economically feasible; (3) the solution should not be proprietary or have licensing fees associated with it; (4) all local exchange providers should be benefitted in the same way and should be required to deploy the same network capabilities; (5) the solution should immediately support wireline service provider portability within the chosen geographic area, and should be capable of expanding to accommodate wireless services within a fixed period of time; (6) the solution should have a minimal impact on numbering resources; (7) call rating should not change as a result of the portability solution; (8) calls originating from non-portability capable carriers must be accommodated; (9) the solution should support any national standards adopted for provider portability; (10) the industry's provisioning databases should be built, deployed and administered in a neutral manner; and (11) database information must be accessible to all service providers (7-8).

The industry should support MCI's Carrier Portability Code (CPC) approach as a first step towards AT&T's longer-term Location Routing Number (LRN) approach (10). Utilizing IN/AIN, the CPC approach works as follows -- once a call is routed to an NPA, the NPA is replaced with the proper CPC, and the call is routed to the provider's end office (11-12). The advantages of the CPC approach are: (1) its compatibility with existing networks; (2) it is a single number solution; (3) it is a non-proprietary solution; and (4) it does not affect the handling of operator functions (*e.g.*, busy line verification, collect calls, calling card calls, third party billing) requiring a query of the Line Information Database. Finally, although MCI's CPC solution would provide portability only within the area served by the number portability database (*i.e.*, it is not a national solution), the same is true of any database solution (12-15).

The LRN approach uses the 6 digit NPA-NXX code to route the call to the appropriate end office switch. The switch will then recognize that this is a ported call by analyzing all 10 digits. It will then look up the SS7 generic address parameter for the proper line number, and deliver the call. The advantages of this approach are that switch modifications and signalling impacts are minimized, and numbering resources are conserved (15-16).

The management and administration of provider portability databases should be competitively neutral. A good model for this database is the 800 portability system, which utilizes common industry and individual carrier (Responsible Organization) databases. Each carrier must be able to upload and download information to and from the routing database (17-18). MCI endorses the N-1 approach to call routing (18).

**Cost recovery:**

Costs should not be borne exclusively by new providers of local services and their customers (20).

**Interim measures regarding number portability:**

Both RCF and DID are unacceptable as long-term solutions for the following reasons: (1) they degrade transmission quality; (2) they add to call set-up time; (3) they increase call blocking; (4) they cause a loss of CLASS features; (5) they accelerate the loss of NANP resources; (6) they impair 911 compatibility; (7) they impact on competing carriers' ability to provide operator services; (8) they impose uneconomic trunking requirements on competitors; (9) they limit the ability to make simultaneous calls to the same individual number; (10) they complicate billing and customer service problems; and (11) LECs will recover all interstate access charges (21-22).

**900 and 500 service provider portability:**

900 and 500 service provider portability will promote competition (25-27).

900 and 500 number portability can be implemented in a manner similar to 800 number portability. Thus, the following facilities and network modifications are necessary: (1) a high-speed signalling network that operates in conjunction with the PSTN; (2) a carrier routing data base; (3) transmission facilities linking the network and database; (4) the availability of SS7 across all LEC access tandems; (5) STPs supporting SS7 in each LATA; and (6) SS7 connectivity must be provided by independent local telephone companies must (28-29).

By permitting 10 digit screening, AIN can facilitate the transition to 900 and 500 number portability (29-31).

The RBOCs must be required to justify their cost estimates for implementing 900 service provider portability (31-33).

## MFS COMMUNICATIONS COMPANY

**Interest:** Competitive local service provider

**Importance of number portability:**

Number portability is one of several essential "foundation" arrangements that must exist before effective local telephone competition can develop (1).

**Service provider number portability:**

This type of portability is the most important in fostering competition and addressing customer needs (2). An MFS survey (attached as Exhibit A)shows 92% of customers would not consider MFS Intelenet services without portability (2). Reluctance to change numbers is particularly sensitive for small business customers, which often receive the worst service and pay the highest prices of any users (4). Several states have recognized the importance of portability (4-5). (MFS attaches as Exhibit B a New York PSC decision mandating interim portability.)

**Service and location portability:**

MFS is not aware of a strong expression of consumer interest in service or location portability, although a robust data base system supporting service provider portability should also be capable of supporting service portability and (within some defined geographic area) location portability, at little or no extra cost (5-6).

**The FCC's role in number portability:**

The ultimate data base architecture and standards for signalling and routing calls should be technically compatible nationwide (6). State trials should be encouraged, and two scheduled to begin in New York should provide critical information (7). The Commission should establish a date certain (3/31/97) for the initial implementation of portability in a limited number of geographic markets (at least one SMSA in each of the major LECs's territories. Once initial implementation has been completed and problems identified and corrected, there should be a fixed schedule for expanding implementation to the 100 largest SMSAs (8). Portability should be implemented in at least 35 markets by the end of June, 65 by the end of August, and 100 by the end of October 1997 (9). Number portability beyond the top 100 markets should be required only if bona fide local competition exists (9).

The Commission should not specify detailed technical standards, but should require that any system be capable of supporting all switch types. Technical standards should be developed through cooperative processes (9).

**Long-term solutions regarding number portability:**

The GTE proposal does not merit further consideration; the remaining proposals discussed in the NPRM should be considered (10). The number portability architecture should meet several criteria: support operator services and E911, use numbers efficiently, be supported by all switch vendors before it is deployed in the marketplace, not require replacement of existing ordering, billing, and operations support systems, be based on SS7 signalling and support Intelligent Network features, provide seamless service to end users without noticeable delays in call set-up or loss features, and interface with LIDBs (10-11).

The N-1 call processing model should be adopted (11). Any master data base should be operated and administered by a neutral third party (12).

**Cost recovery:**

Costs incurred by a third-party administrator to install and operate a portability data base system should be borne by all customers within the geographic area served by that system, through a per-line or per-number surcharge (13). Costs incurred by all local service providers and IXCs desiring to terminate calls in that area should be viewed as costs of doing business (13-14).

**Interim measures regarding number portability:**

All interim measures have substantial disadvantages and are not acceptable other than as very short-term substitutes for true number portability (14). Remote call forwarding is the best interim solution (14-16).

## MISSOURI PUBLIC SERVICE COMMISSION

**Interest:** State regulatory agency

**Importance of number portability:**

**Service provider number portability:**

This is already a concern in some states and is likely to be a controversial issue. It will likely foster competition in the provision of local telephone service. (3)

**Service provider portability:**

Supports concept that telephone customers should be able to change and upgrade their service without changing their telephone numbers. However, the expense of upgrading each switch in each exchange to provide ISDN, where only a limited number of customers demand such service, may not be effective. With this service, and other special services, it may very well be preferable to provide special routed connections of the few demonstrated customers at a comparable rate to that of local ISDN until sufficient demand is demonstrated. (2)

**Location portability:**

Geographic number portability requires great expense and has uncertain benefits. Many issues, including billing and toll charges, become more complex. There has been no known or demonstrated demand for geographic portability. Only a small number of customers may benefit, and the portability needed may already be available through national 800 service network. Telephone number portability over shorter distances may currently be possible for a significant portion of the population using the existing telephone network configurations.

The telephone industry generally has been replacing small free standing exchange switches with remote subtended units tied to larger and more modern central exchanges, called host/remote configurations. These ready made groups of exchanges are capable of providing number portability which may be an appropriate low cost method of determining the demand for this service. In addition, this would allow for more efficient use of under-utilized NXX codes.

It is also possible that number portability could be provided through the AIN system. Considering the unknown level of demand, the extent of geographic number portability should be carefully considered. If demand is demonstrated, then the 800 service may serve as a model with perhaps the dedication of an NPA to those customers desiring and willing to pay for wide distance portability. (3-6)

**The FCC's role in number portability:**

The FCC should play a crucial role in encouraging competition. Service portability may require relatively little intervention. Service provider portability may require the more active approach of removing anti-competitive barriers to entry. (6) The FCC should establish broad guidelines that allow individual solutions to be reached in the states as needed. Such guidelines would allow customers to maintain their current number regardless of which company provides service. (3) As local competition is introduced at the exchange level, the FCC should provide broad regulatory support by the removal of barriers to competition. (6-7)

## NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

**Interest:** Association of state regulators

**Importance of number portability:**

Number portability is an integral element of local exchange competition (4).

**The FCC's role in number portability:**

The Commission should collect more information (monetary and non-monetary) on the development and implementation of different types of number portability (4). State-mediated trials are rich sources of information about portability, and the Commission should continue to allow and encourage States to move forward with their existing and future workshops, trials and tests (5). The FCC should allow State implementation of service provider portability solutions on a local, state, or even regional basis (5). The FCC should use data gathered from the comments and State proceedings to establish nationwide policy guidelines concerning number portability. However, the Commission should recognize and accommodate different State-implemented service provider solutions that are not inconsistent with nationwide number portability policy (5-6). (NARUC attaches two resolutions, one regarding number portability and the other regarding Administration of the NANP.)

## NATIONAL CABLE TELEVISION ASSOCIATION

**Interest:** Association of cable television companies, which are the "most likely competitors to the LEC monopolies" (1).

**Importance of number portability:**

**Service provider number portability:**

Service provider portability is a prerequisite to the development of lasting local exchange competition (3). The issue of service provider portability should be separated from the other forms of portability and deserves fast track attention (8).

**Service portability:**

Some form of service portability, such as switching from a wireline to a wireless provider, might be resolvable in the context of service provider portability, but this issue should not delay provider portability (8-9 & n.14).

**Location portability:**

Location portability is likely to be technically complex, and a focus on it may delay the implementation of service providers portability, which is much more important from a competitive standpoint (9).

**The FCC's role in number portability:**

The commission must take a leadership role because market forces alone will not establish a number portability solution (5). If number portability is left completely to the states, the result could be a patchwork of inconsistent technical and economic requirements (6). Nonetheless, state trials will serve as valuable information sources, and the states and Commission should work in concert (7). Commission rules should create economic incentives for the speedy development and implementation of a technical solution and with rigid milestones to achieve this goal within a time certain (9). The Commission should rely on industry standards-setting groups, but should set hard-and-fast deadlines for resolving various technical and policy issues (10).

**Long-term solutions regarding number portability:**

Any solution must avoid excessive cost and degraded service quality, support operator and E911 services, and efficiently use telephone numbers (10). Neither the terminating access provider or originating service provider call processing scenario is in the public

interest (10). In terms of geographic scope, crossing area codes is not necessary at this point, and state-wide or regional approaches would add confusion and be unnecessary to the development of local competition (10-11). There should be a single, neutral administrator (11).

**Cost recovery:**

Costs should be recovered from all customers. Costs of creating the portability capability should be equitably shared among all carriers, including traditional LECs and new entrants (11).

**Interim measures regarding number portability:**

Interim measures do not constitute number portability at all and may delay real competition indefinitely (8). However, until true number portability is possible, the commission should require incumbent LECs to offer interim measures for free (12-13). If bill and keep is not adopted, any compensation scheme involving a payment for terminating traffic should include discounts on interconnection, because otherwise the incumbent LEC will reap a windfall (13). These measures must be recognized as interim only, and not delay or prevent implementation of true number portability (13-14).

**500 and 900 service provider portability:**

Portability of non-geographic numbers is beneficial to consumers and fosters competition. The Commission should vigorously pursue such portability, but consideration of a solution for non-geographic numbers should not delay resolution of the geographic service provider portability issue.

## NATIONAL EMERGENCY NUMBER ASSOCIATION

**Interest:** Association of entities seeking to implement universal emergency telephone numbering system

**Other:** Number portability solutions must support E911 features such as ALI, ANI, and selective routing (1-2). If the physical location of service remains unchanged, the ALI capabilities of present wireline #911 should remain intact (2). Location portability may not be as important to consumers as service provider or service portability, and from a technological standpoint, may benefit from deferral in a period when other ALI solutions are ripening (3).

## NATIONAL EXCHANGE CARRIER ASSOCIATION

**Interest:** Administrator of access charge/subsidy pools for small LECs

**Importance of number portability:**

**Service provider number portability:**

Demand for local number portability appears to be driven by the level of competition. Local exchange competition is developing more slowly, if at all, in rural areas. In the absence of proven demand, it is not cost-effective to require local number portability (2).

**Services excluded from number portability:**

Small telephone companies (i.e., companies that participate in the National Exchange Carrier Association's tariffs, as well as any non-Tier 1 company that files its own tariffs) should be exempted from service provider number portability requirements until significant competitive presence arises (2). If competition arises, LECs should be provided with sufficient time to provide service provider number portability. This recommendation is consistent with the approach taken by the FCC in implementation of equal access and provisioning of direct trunked transport (2).

## NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

**Interest:** Association of small and rural local exchange carriers.

**Importance of number portability:**

Number portability will probably not change the economic and geographic factors that limit the number of service providers in rural areas (2). Therefore, it should not be mandated in rural areas (3).

Before requiring number portability in rural areas, the Commission should carefully weigh the costs and benefits of such a mandate. In so doing, the Commission should ensure that incumbent rural carriers and their customers do not end up subsidizing either alternative rural carriers or nationwide number portability (2-3).

## NATIONAL WIRELESS RESELLERS ASSOCIATION

**Interest:** Association of resellers of wireless services

**Other:** Number portability should include number transferability for resellers. Currently, it is difficult for resellers to transfer their customers from one carrier to another; this impedes a reseller's ability to negotiate better wholesale rates and offer lower prices to subscribers (2). Number transferability in the CMRS marketplace would be a boon to competition and provide substantial benefits to consumers (3).

## NEW YORK PUBLIC SERVICE COMMISSION

**Interest:** State regulator

**Importance of number portability:**

**Service provider number portability:**

Service provider portability is essential to meaningful local exchange competition (1).

**Service portability:**

While some customer may benefit from service portability, there appears to be no overriding policy objective to be served by encouraging or mandating service portability simply to stimulate selected new service offerings (5).

**Location portability:**

Location portability is worthy of exploration, but there are many attendant effects that have to be considered, including the impact on area code splits, customer confusion, and complexity of routing (3-4). The need to mandate location portability is not critical at this time because of the importance of developing service provider portability (4).

**The FCC's role in number portability:**

The Commission should work with the states to support development of portability technical and performance standards by industry organizations (5). A mandated national solution may be more costly and less effective; at this point, there is no clear solution to portability, and no evidence to submit that a one-size-fits-all approach is the best way to proceed (6).

**Long-term solutions regarding number portability:**

One overriding principle in any long-term solution should be that the customer does not have to change his or her phone number to gain the benefits of service provider portability (7). Portability should support access to operator and E911 services and be consistent with the efficient utilization of telephone numbers (8). The "N-1" call processing scenario should be adopted -- only this scenario allows provider portability to be introduced on a regional basis, without affecting other areas where is it not needed (8-9).

**Cost recovery:**

Number portability costs should be shared by all carriers, not just new entrants (10).

**Interim measures regarding number portability:**

Interim arrangements are necessary in the short term, but are only interim and should not delay efforts to develop long-term solutions (10-11).

## NEXTEL COMMUNICATIONS, INC.

**Interest:** Wide-area and traditional SMR provider.

**Importance of number portability:**

**Service provider number portability:**

This is most important to increasing competition, as customers can change carriers without changing their telephone number (3).

**Location portability:**

Adds significant complexity to the number portability solution, but might increase competition if implemented on a local basis. However, nationwide location portability is already available through the 500 SAC (4).

**The FCC's role in number portability:**

Before establishing a date for the implementation of number portability, the FCC should set a deadline for the development of an industry-wide solution by an industry committee. At a minimum, this plan should include local area service provider number portability (9). The NANC could then be tasked with ensuring that this plan is implemented in a timely fashion. (8)

The NANC could also appoint an independent number portability administrator to govern the new database (8). The FCC's role in assuring nationwide standards is essential in order to avoid the inefficiencies associated with differing state standards. Such inefficiencies include the difficulty in developing nationwide networks, overlapping and duplicative developmental efforts, and an increased administrative burden on end-users, carriers, and regulators. (10)

**Long-term solutions regarding number portability:**

The ultimate solution must: (a) be consistent throughout the nation and support all industry segments (*i.e.*, incumbent CMRS providers, new CMRS providers, IXCs, LECs, CAPs) (4); (b) conserve numbering resources, which are rapidly being exhausted (6); (c) avoid the creation of a monopoly that allows one industry segment to control portable numbers (6-7); (d) not degrade the quality of call processing time or currently offered services such as E-911 and caller ID (7).

**Interim measures regarding number portability:**

Interim solutions that are not designed as stages toward a final solution (*e.g.*, RCF, DID) are expensive, bad for the network, eliminate custom calling features, and do not translate into long-term solutions. Rather than utilizing these inefficient interim measures, true number portability should be implemented in geographic stages, beginning with urban areas, where demand is the greatest (5-6).

**Services excluded from number portability:**

The ultimate solution must take into account the fact that the wireless industry is significantly more competitive than the wireline industry, and the wireless industry lacks a standard technological platform or signalling protocol. Numbering portability must not interfere with the implementation of new CMRS technologies and services (7-8).

## NYNEX

**Interest:** Regional Bell Operating Company

**Importance of number portability:**

Number portability will provide some public benefits (4). However, the immediate implementation of a long-term solution is not a necessary condition to the overall growth of local competition. Number portability is highly market-specific, and the need for development and possible deployment should be evaluated through cost/benefit analyses (7). Some customers do not strongly value their telephone number -- NYNEX has a 23% turnover rate of customer numbers annually for no-competitive reasons (8). There is some evidence that customers are not willing to pay to keep their telephone number (8). The potential that number portability will preserve numbering resources is difficult to ascertain at this time and cannot be considered a primary benefit of implementation; the Commission should ensure that number portability does not aggravate the code exhaust situation (11-12).

**Service provider number portability:**

Service provider portability is most closely related to development of local competition, while location portability and service portability are more closely related to customer mobility and flexibility (5).

**Location portability:**

Assuming a data base solution, the geographic scope of location portability, at its largest, should be confined to the lesser of an NPA or LATA so that geographic numbers retain significant for determining charges, to provide greater convenience for carriers since they would be able to route queries to the data base for that NPA/LATA, and to allay concerns about exportation of numbers (14).

**The FCC's role in number portability:**

FCC guidance and industry cooperation are necessary to achieve a technically feasible solution; before any national fully operable solution can be adopted, there must be a clear understanding of the costs (2). The Commission should develop broad policy objectives and guidelines regarding long-term solutions, rather than attempt to choose a particular solution (3). It should focus first on service provider portability for geographic numbers and then look at other types of portability (5, 18).

The Commission should not proceed with haste to mandate a specific solution or determine that portability should be deployed within a certain time frame; rather, it should provide conceptual guidance and direction to the industry (10). Guidelines should include: definitions for various forms of portability; uninterrupted call processing; justification through cost/benefit analysis of a solution that can be part of a long term evolution to a solution capable of encompassing all forms of portability; no degradation of service quality; industry-developed architectures and standards; joint assumption of burdens and responsibilities by the communications industry as a whole; and transparency to end users (15-16).

**Long-term solutions regarding number portability:**

Attachment A contains a charge comparing the various proposed solutions and indicating the aspects of each that need further work (20 & Att. A).

**Cost recovery:**

Different benefits may result from the implementation of number portability; some may be more general, such as increased competitive environment, and some will be more specific, benefiting a particular customer or carrier directly. Cost sharing should reflect these varying benefits New entrants should pay a reasonable portion of the cost of implementing any solution and let individual consumers determine whether they are willing to pay for the benefit of having their number ported (21-22). The costs for implementation of a number portability capability based on a Commission mandated should be treated exogenously under price caps to the extent they are not directly allocated to customers by the Commission (22)

**Interim measures regarding number portability:**

Interim solutions are a known quantity which can and should be provided not to enhance competition; these solutions could suffice in the near term to address the needs of competing providers (2n.2). As in the 800 market, interim solutions to portability will enhance customer choice, lower barriers to entry, and allow the industry time to work through long term issues (6n.7). Interim solutions compare favorably to the functionality which the proposed "long term" solutions may provide in the future (9 & Attachment A), and are viable when compared to the current long term solutions on the table (20).

**900 service provider portability:**

The need for service provider portability for 900 number has not been demonstrated. The existing switch-based solution for 900 service is not easily transferable to a portable architecture, and the growth of the 900 service is not clear (19).