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Reforming the Financial Support System for Universal Service in Telecommunications

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Reforming the Financial Support System for Universal Service In Telecommunications.

Thanks, Mr. Chairman. I'm glad to see that Congress -- through these hearings -- and the Administration -- as expressed by Vice President Gore's January speech in Los Angeles -- recognize the link between new competition and the reform of universal service. They should be commended. But how can this link be fashioned?

There are two sides to the universal service issue -- allocating money and collecting it. I will concentrate on the revenue raising side, which is more painful, with a proposal that might be a starting point for reform.

Of course, increased efficiency, competition, new technology, and a narrower targeting of benefitted groups may well reduce the magnitude of the necessary money. But these measures will not likely do away with a core of politically and socially mandated support to rural America, the poor, emergency 911 services, relays for the hearing impaired, and other services deemed valuable to society. We can disagree about what services might be included, and what financial magnitudes would be involved, but not that it would be nonzero. Therefore the question still remains: how do we pay for the required subsidy?

I think your committee got it right on universal service when it stayed out of micro-managing the subject, and leaving the details to

be worked out by the FCC and the States.

Any new system should meet seven "neutralities".

1. *Competitive neutrality*. A new financing system should not skew the relative market strength of any carrier.

2. *Structural neutrality*¹: *there should be no incentive to vertical or horizontal integration.*

And similarly, neutralities with respect to technology, applications, content, geography, transition, and jurisdiction.

And no rate shocks, windfalls, or unilateral advantages to some competitors. And stability in generating the targeted revenues.

And administrative and user friendliness. Also, and that is important, any new system needs to integrate the existing ones. And finally, there must be incentives to production efficiencies.

2. Options for Reform

In structuring a system of contributions towards universal service, these are, broadly speaking, the alternatives.

1. *Expand access charges among carriers*. In a competitive multi-carrier local environment, there would be uneconomic incentives for carriers to avoid interconnection.

2. *Public financing: general tax revenue*. In the present

¹ An example how non-neutrality affects industry structure may be AT&T's recent acquisition of McCaw Cellular. According to Wall Street analysts, this deal significantly affected by AT&T's desire to reduce the access charges it is paying to LECs by establishing an alternate access route to users.

budget environment this is not a realistic proposition.

3. *A sales tax on telecommunications services or equipment.* It would suffer from the political difficulty of raising a new tax, of having to deal with difficult borderline issues, and of neutrality with respect to competition, structure and application.

4. *A net transmission account system* of charges proportional to the transmission revenue, net of payments made to other carriers, and with credits for universal service contributions made otherwise. This "NetTrans Account system" is the recommended system after calibrating it with many of the affected consumer and industry groups. The money would go into a universal service fund, which would support

1. Certain types of users, who would get vouchers to select carriers.
2. Certain geographic regions, in particular low density areas, with those carriers providing services in those areas benefitting on a non-exclusive basis.

Certain applications, such as access to schools and libraries.

The proposal operates on the premise of neutrality -- equal rights and equal burdens to all carriers in the network system. Whether the carriers are traditional or new, they would all contribute financially to the level of universal service support decided upon by society through

the political and regulatory system, and they would have full rights to enter and compete. The proposed system is not a transfer mechanism per se but primarily an accounting method to assure a fairness of burden. The existing support system need not be scrapped, though it could be. Existing contributions are taken into account and credited. Level playing field competition becomes possible. And, importantly, customers, including those that are subsidized, are able to choose among carriers. Competition, innovation, and universal service can coexist.²

At their most basic, NetTrans Accounts are not primarily a new form of *transferring* money. They are rather a way of *keeping score* that all carriers pay a proportionately similar share to the maintenance of that type of universal service which the political process has decided upon. Only insofar as some carriers may be contributing less than others would the NetTrans accounting result in transfers to and from the accounts. This system also means, importantly, that one need not (though one could) eliminate or change existing contribution programs. They are simply taken into account and credited in the process.

The system would be initiated at the same time that local competition would be fully permitted. It would have to be tied to a

²For a more detailed version, see Eli M. Noam, *NetTrans Accounts: Reforming the Financial Support System for Universal Service in Telecommunications*, Columbia Institute for Tele-Information, Working Paper #648. 1993.

cost-reduction mechanism of competition, so that inefficient carriers could not shift their costs to others.

The elements of this plan are now explained stepwise.

"Carriers"

Who and what is included in the system? Entities that provide "transmission path" services to third parties for compensation.

Included are all facilities-based two-way transmission carriers with an FCC carrier identification code (CIC) that are subject to the FCC's Title II regulation (or its state equivalents), including LECs, IXC's, cellular carriers, CAPs, and satellite carriers.

Excluded are enhanced service providers (ESPs), Information Providers (IPs), resellers, intraorganizational private networks, equipment manufacturers, and cable and broadcast operators (except for their two-way telecommunications transmission services).

To levy a charge on telecommunications equipment would either require continuous line drawing problems, or it would reach far into the computer and video industries. This would likely be politically unpalatable and would go far beyond the goal of reorganizing the existing subsidy system *within* the telecommunications sector.

To include upper level, enhanced, and information services could be a levy on information and speech and as such constitutionally suspect. It would also greatly increase the number of entities subject to the account system and thus increase its complexity. And it would lead to complicated questions of what is counted as

enhanced services revenues.

Traditionally, what can be broadly called the mass media -- cable television operators, broadcasters, direct broadcast satellites, wireless cable -- have not been part of the support system for universal service in telephony. One cannot burden these companies and their customers without providing the benefits to them, too. They should be excluded for traditional mass media offerings. It would be a different matter if they entered telecommunications-like services, in which case such services should be included.

Also exempt could be start-up carriers or new operations within these categories, partly as a form of "infant-industry" assistance, and partly to reduce the administrative burden by including only carriers that seem to survive. Such exemption should be limited in duration, for example to three years.

"Transmission path revenues".

On the whole, revenues are a good proxy for economic activity, and they are often available as a byproduct of the regulatory process. If new carriers were to be stymied in entering the market, their revenues and thus the NetTrans obligations would be small. Transmission path revenues are those for transport plus basic switching. Symmetrically to the earlier exclusion of ESP's, omitted are enhanced services; information services; one-way services; equipment; software; directory assistance; caller-ID; and billing and collections. The NetTrans account system would benefit from the

already existing requirement on LECs to separate basic revenues from "enhanced" revenues.

"Net of payments made to other carriers who are part of the system".

An important feature of the NetTrans account system, derived from the value added tax concept, is to give credit for the cost of inputs, i.e. for transmission path inputs purchased from other carriers. This feature of the plan means that there is no accumulation of tax upon tax, or a tax upon a contribution, or a need to tax imputed value-added services and their providers, as would be the case with a sales tax. In consequence, there are no advantages to being vertically integrated across multiple stages.

"Independently Administered." For the account system to operate equitably and without suspicion, it could not be administered by any particular industry group, or else it may shift its costs to its rivals.

We recommend an inter-industry board comprising all industry segments, including large users, and representatives of the public. Such an entity would subcontract with others, such as accounting or consulting firms, as with bodies already administering inter-industry revenue flows, for the actual operations.

"Credit for Universal Service Contributions Made." At present, carriers contribute to universal service in a variety of ways. Some pay access charges that are substantially above cost. Others serve rural areas at prices that are below cost, etc. These contributions should be

credited against the universal service fund debit.

One major advantage of the NetTrans account system is that it does not force an already existing subsidy mechanism to change. Nor is it dependent on such a change. A rebalancing of rates could take place, but one need not wait for it, because NetTrans can accommodate either situation. If access charges, toll pools or lifeline contributions have already been made by a carrier, they are credited. If the present hodge-podge of contribution programs should, by some miracle, be perfectly equitable in its net financial burdens on the various carriers, no additional transfers at all would have to take place.

Jurisdictional Issues.

State Jurisdiction. One question to consider is the role of the state public utility commissions in this system. On the one extreme, if the system were entirely state-based, carriers would shift operations, or at least accounting costs and revenues, according to which state offers a lower rate. The result would be a "race to the bottom" by states to attract telecommunications carriers, and inefficient operations by carriers chasing the lowest rate. The other extreme, total federal and uniform rules, is also unpalatable, because it takes no account of regional preferences. This suggests a mixed system. Federal guidelines would establish a national system. States would have a role in the implementation, as well as could have variation on the benefits side. The states' have considerable expertise in calculating the cost of

universal service in their region. Furthermore, the states might also have different priorities. Some might wish more generous support mechanisms for rural users; others would want to be more supportive of the cities and the poor. States could establish, for example, more or less generous universal service policies, as they can today. The credit mechanism would have to have state caps so as not to permit any state to be generous at the expense of the other states. To include the states is not only good policy, it is also good politics, and it is squarely in the tradition of American federalism.

For the FCC, the measure would be in the nature of integrating its already existing subsidy schemes. Participants would only be those carriers who have applied for an FCC identification number. Carriers that would not interconnect into the larger network system would not be included in the financing arrangements.

It therefore seems that the FCC would be within its delegated powers to introduce such a system. But, it would also make sense for the broad outline of the system to receive express Congressional and Executive approvals. But it would be a mistake to make approvals in a form that is as detailed as tax legislation, and with special provisions for various favored causes. The devil is in the detail, and a specialist agency such as the FCC, with its independent status, would be best in a position to deal with the details.

CONCLUSION

Why fix the old system? The answer is that the old system is

a patchwork that barely holds together, and that it is a stumbling block in the transition to a competitive telecommunications environment.

Competition and technology will not solve the universal service issue, because the policy question is not one of production efficiency but one of distributional allocation. Sooner or later we will have to face the problem. The underlying forces will not go away; they bring us many benefits, but they also force us to pursue traditional policy goals, such as universal service, in new ways. This is the challenge to you.

In the past, the monopolist's profits used to support some of its endusers, especially residential and rural customers. More recently, competitive inroads have limited the ability to generate the funds for such internal cross-subsidies. Since the demands for funds for maintaining universal service have not declined, the old system has been propped up Rube Goldberg style. We have tried to conduct social policy with the tools of industrial structure policy, and have been less and less successful in either. Similarly, upgrade plans for

telecommunications infrastructure have been affected by the question whether some segments of society would fall behind. For the longer term, therefore, the question must be faced squarely: if we want to continue to assure the electronic interconnectivity of all members of society, how will we pay for it?

.3. *Technological neutrality.*

4. *Applications and content neutrality.*

5. *Geographical neutrality.*

6. *Transitional Neutrality.* There should be no shocks or windfalls to any participants due to transition to a new system.

7. *Jurisdictional neutrality.* The new system should be integrable into the federal-state regulatory system.