CONTRIBUTION OF IDEAS TO THE DISCUSSION OF THE DRAFT STUDY ON A SOUTH AMERICAN BROADBAND NETWORK FOR INTEGRATION

(November 7, 2016)

We have examined the agenda for the meeting scheduled to be held on November 15 and 16 in Asunción, and found that the South American Broadband Network for Integration will be discussed.

As time has elapsed since the previous invitation to tender and, during this period, each country has further developed its own backbone network, it is necessary to revise the process and not to issue a new invitation to tender without having first defined the actual state of connectivity among the UNASUR countries.

Argentina is analyzing international connectivity in 26 border crossings, which will connect the national backbones —both public and private— to those of Chile, Bolivia, Brazil, Paraguay, and Uruguay.

Once the links are established, the implementation of more efficient routes between the countries does not depend on their being laid out but on the local IPX networks and on routers running the OSPF protocol. This protocol uses path cost to rank routes on the basis of parameters such as bandwidth and link congestion, which helps build a database including link quality weighting.

As the physical layers are already established in most countries, the routes are established at the data routing and transport level, which is not measured to determine the traffic flow between the nodes of the countries.

When analyzing the development of a new network linking the countries, the traffic between the countries should be estimated first, since filled links may not justify the laying out of alternative links to those already in place.

From a review of the TERMS OF REFERENCE document entitled "South American Connectivity Network for Integration," it follows that the project rationale should be reconsidered, because the reasons expressed are outdated in the light of the projects that each country has been undertaking.

Transport and distribution developments are all mixed up in the rationale, which addresses topics that are the sole and exclusive responsibility of each country, such as the last mile issue (paragraph 1.3).

Much of the information that would be obtained in carrying out the activities is already available and could be stored in a shared data reservoir, thus avoiding the need to undertake a study in which we will provide and correct information, resulting only in administrative easements. Activity 1: A socio-demographic study of the population distribution to identify how the population is arranged according to the socio-demographic and economic conditions of the countries and to draw conclusions concerning the needs and implications that may arise from the population density and composition in terms of the implementation of the connectivity network infrastructure for each member country. (This is not necessary, as each country is aware of its own reality. It would be best to focus on the network traffic vis-àvis the capacity in place.)

Activity 2: A study of the supply to identify the existing and planned infrastructure capacity for Internet connectivity and the current services and costs from retail and wholesale data carriers (including land, satellite, and undersea transmission), infrastructure for Internet connectivity meaning data centers, Internet exchange points, network access points, and operators' infrastructure; and to draw comparisons between the different countries in terms of the planned uses and requirements of the infrastructure needed in order to ensure the provision of high quality services. The Company should also, through a concentration and competition analysis, provide information about how the market is shared between the various players in order to give a detailed description of the degree of competition in the different countries and evaluate the potential market distortions related to the services available. (This is a domestic matter for each country; there is no need to determine international connectivity.)

Activity 3: A study of the demand, taking into account the analyses made in Activities 1 and 2, to identify primary demand behavior in terms of consumption and whether any demand is not met, and to provide an analysis of the current requirements that should incorporate i) the demand for data traffic between an individual country and each UNASUR country, including transit traffic, and ii) the demand for data traffic between the UNASUR countries and other regions in the world, such as the U.S., Europe, and Asia-Pacific.

Activity 4: An estimation of the demand, i.e. the provision of a forecast of future demand (year-to-year growth over a 15-year period) for data traffic in each country, taking into account the behavior of demand as identified in Activity 3 (future demand between an individual country and each UNASUR country, and future demand between a country and other regions in the world, as stated above) and the socio-demographic conditions in Activity 1. To conduct this study, the consulting firm should consider the existing and planned services and infrastructure in the region as well as any new services that might be offered after infrastructure deployment. For this purpose, special attention should be paid to sectoral and the region's telecommunications market trends to justify the forecast. The results of these studies will constitute the basis for the Technical Study, to be carried out in the next component. (This would remain the same, but I would revise the scope, and there is no need for a consulting firm to do this, except for specific technical issues.)

The description included in paragraph 3.2.3, entitled "Activities," must be completely revised.

The demand for connectivity referred to in paragraph 3.3.4 is not clear — demand by country or between countries? The network is autopoietic. Effective demand is determined congested routes. The study proposed is too theoretical, and may lead to serious misunderstandings.

In light of the above, I believe that a new invitation to tender should not be issued, because tenderers are not the problem; the problem is the definition of the purpose and scope of the invitation to tender.

I accordingly consider that the process should be cancelled and that the terms of reference should be completely revised. Otherwise, we will procure just a book to put in the bookcase.

Sincerely,

Hugo D. Miguel

Undersecretary of Planning

hmiguel@mincomunicaciones.gob.ar

Tel: +54 11 4318 9442