A BRAZILIAN STATE GOVERNMENT REVALUATES ITS TELECOMMUNICATIONS INFRASTRUCUTRE

General overview

Here we have a State government in Brazil, analyzing the feasibility of centralizing the contracting and management of its telecommunications infrastructure.

Each government agency had autonomy to contract and manage its own telecom infrastructure independently. This strategy, although generating operational flexibility, was clearly generating higher costs.

The organization itself was composed by 72 agencies and state owned companies having 1500 sites with approximately 80000 employees spread all over the state.

The monthly telecom budget including voice and data was USD 2,000,000. There was some voice integration within some of the agencies but for the most part voice and data had different transport strategies.

There was a perception that negotiating as only one large organization the state government would be the biggest client for any of the telcos operating within the state. That would increase its leverage over them and would generate the possibility of achieving substantial discounts.

Operating the network as only one large organization would also allow the identification of the locations where more than one state agency occupy the same address avoiding the need for multiple circuits serving the same address and therefore reducing costs.

Integrating voice and data between the state main administrative centers would generate savings of thousands of dollars, given the fact that most voice traffic was among the agencies themselves and without a centralized management none would take the initiative of building Private WANs, MANs or integrating voice.

The state already had an IT services company (completely owned by the state) centralizing the data processing for the main agencies (although some agencies and state controlled companies had its own data centers) and this company was the natural option to assume the telecommunications centralization process.

The data-gathering phase identified the following:

- 1500 points of presence distributed throughout 72 agencies and 978 addresses.
- 82937 workstations.
- 657 sites with dedicated circuits, among them there are 200 whose connectivity was already provided by the State's IT provider company (Approximately 30% of the total) facilitating even more the centralization.
- The State's IT provider already owned 9249 of the workstations today in use by the state what corresponds to 11% of the workstations being used.

The cost structure identified was as follows:

Type of service	Monthly Cost
Mobile calls (local)	USD 816,557.87
Frame-relay Circuits	USD 488,443.67
Local Calls	USD 244,195.60
Trunks Subscriptions	USD 336,664.81
Mobile calls (Long distance)	USD 7,899.31
Long distance calls	USD 15,664.23
Mobile Calls International	USD 1,415.16
TOTAL	**USD 1,910,840.67**

It was identified that the savings would come from six main sources:

- Massive deployment of mobile trunks in the state's PBXs, that would transform the cost fix - mobile to mobile – mobile what in Brazil tariff system means a reduction of almost 45% in the cost of the minute;
- Renegotiation with the state main telco bringing the cost down approximately 60%;
- Merging the circuits today installed in the same sites reducing the number of necessary circuits in almost 40%;
- Improvement the internal controls avoiding unnecessary expenses and allowing a better management;
- Renegotiation of the voice contracts bringing down the current costs in approximately 30%;
- Integration of voice and data between the state's main sites.

All these initiatives allowed a monthly saving of 57% of the current expenditures as shown through the spreadsheet bellow:

Type of service	Monthly Cost	Savings %	Amount of savings month
mobile calls (local)	USD 816,557.87	60.72%	USD 495,813.94
Frame-relay Circuits	USD 488,443.67	76.00%	USD 371,217.19
Local Calls	USD 244,195.60	60.00%	USD 146,517.36
Trunks Subscriptions	USD 336,664.81	25.00%	USD 84,166.20
Mobile calls (Long distance)	USD 7,899.31	41.91%	USD 3,310.39
Long distance calls	USD 15,664.23	15.00%	USD 2,349.63
Mobile Calls International	USD 1,415.16	90.57%	USD 1,281.78
TOTAL	**USD 1,910,840.67**	**57.81%**	**USD 1,104,656.50**

The deployment of design tools was what made possible the analysis and simulations which gave the state's management a clear view what had to be done and why, allowing the identification of which economical benefit was associated with each initiative.