

Central Information Technology Office

An Agency of the Ministry of Mining and Telecommunications



Central Information Technology Office

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MEMORANDUM

To: Cabinet Secretary
Financial Secretary
All Permanent Secretaries
All Chief Executive Officers

CC: The Hon. Daryl Vaz, Minister without Portfolio with responsibility for Information and Telecommunications
Mrs. Patricia Sinclair McCalla, CEO – Public Sector Transformation Unit

From: Marie Wint-McKenzie, CEO (Acting) – Central Information Technology Office Limited
MW McKenzie

Date: April 23, 2010

Subject: **Best Practices for the Operations of Private Branch Exchange (PBX) Systems within Government Ministries, Departments and Agencies**

In reference to the memorandum dated March 5, 2010, from the Hon. Daryl Vaz regarding the Procurement of Private Branch Exchange (PBX) for Ministries and Agencies, attached is the rationale for the directive and the best practices to be observed in current and future PBX acquisitions.

These directives should guide the creation of the Request for Proposals for PBX and current installations.

Should there be any need for clarification of these best practices, please contact the Central Information Technology Office Limited (CITO) at 960-1009 or email at info@cito.gov.jm. In addition, this memorandum and related documents will be posted on the CITO website at www.cito.gov.jm.

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Private Branch Exchange (PBX) acquisition

OVERVIEW

In reference to the memorandum dated March 5, 2010, from the Hon. Daryl Vaz re - *Procurement of Private Branch Exchange (PBX) for Ministries and Agencies*, (see attached) outlined below are the best practices to be observed and the rationales for the directive for current and future PBX acquisitions.

In reviewing the National Contract Commission (NCC) submissions for PBX systems, the Central Information Technology Office (CITO) has observed that not much attention has been given to realize business objectives or to mitigate future costs.

The Public Sector Transformation Unit (PSTU) is undertaking an Economic Review of Government's telecommunication expenditure for the past five (5) years. The analysis has already shown significant telecommunication expenditure as it relates to voice or fixed lines and most recently cellular calls.

With the aim of reducing and curtailing avoidable expenditures, it is necessary to proceed with caution with regard to future investments for PBX related items. It is therefore imperative that attention be given to the following areas for current PBX installations and for future Request for Proposal (RFP) for PBXs.

Below are a number of features that, when applied, provide for significant cost savings. An assessment of the current systems in operation across Government will be undertaken to see where synergies may be realized across Ministries, Departments and Agencies (MDAs). In the interim, all MDAs must consider the following features for current PBX installations and for future Request for Proposal (RFP) for PBXs, in an effort to reduce telephone costs and increase business value.

1. Use of Direct Inbound Dialing (DID) and Direct Outbound Dialing (DOD)

DID allows for external parties to dial directly to an extension, whilst DOD allows the user to dial directly out without going through the operator. These options are to be enabled so as to reduce the number of straight lines assignment. Using the DID & DOD option with T1 voice line(s) will result in savings. One T1 line can accommodate 24 concurrent calls on up to 96 extensions, which is less expensive than 24 straight lines.

Studies done at the Ministry of Agriculture and Post & Telecommunications Department shows that a straight line is only used 30% of the time during working hours. Therefore using a T1, will allow the full and efficient use of the communication spend. The table below demonstrates these cost benefits:

	Service available	Cost JA\$
24 straight lines	24 lines	\$48,000.00 per month (24 x \$2,000)
T1 line	24 lines, that can be shared among 96 extensions	\$38,000.00 per month Savings of \$10,000 per month \$120,000 per year

2. Least Cost Routing

This feature is available from the 3 major telecommunication providers and allows the PBX to redirect mobile outgoing calls through a router, so that the call is billed as within the telecommunication provider network, i.e., a mobile to mobile call.

3. Call Accounting Systems

The inclusion of a Call Accounting System that can send bills electronically to the users of the PBX is critical to cost recovery. This will increase cost recovery from users and lessen the need to print or photocopy phone bills.

4. Integration with Closed User Groups (CUG), Email Service and Fax Services

All PBXs in entities with a CUG must ensure that the PBX includes a line from the CUG provider. This is to ensure that calls from the PBX to the CUG are seen as within the group. This line can also be the same one used for the least cost routing option.

Where corporate email services are utilized by the entity, the voice messaging from the PBX and Fax Services are to be incorporated into the email services. Where the budget exists, unified communication between all services should be implemented.

5. Interconnectivity with Agencies within the core Ministry

When acquiring a new PBX or upgrading a current system, provision must be made to:

- Evaluate the possibility of sharing PBX resources with another entity, especially if the cost of the system exceeds J\$5 Million and there is another Government entity with an upgradable PBX system within close proximity (3km).
- That provision is made to connect the entity to the core Ministry in the short to medium term as this will allow for extension calls between the entity and the Ministry.

For these initiatives to interconnect with other agencies or the core Ministry, underground fibre from the National Works Agency is to be used as a first choice for interconnectivity. If this is not available, aerial fibre can be used with redundancy, as aerial fibre is more prone to disruptions.

Lessons Learnt - VoIP

When designing a Request for Proposal (RFP) for a PBX that will utilize Voice over Internet Protocol (VoIP) technologies, you are advised to consult with other Government entities who have successfully installed this technology. This is to ensure that similar standards are kept within Government of Jamaica and the interoperability of the technologies in the future.

Entities that have successfully implemented VoIP PBX systems are:

National Land Agency	Contact: Mr. Gerry Vaz DID 750-4007
Registrar General Department	Contact: Ms. Kerry Ann Cross Lime 749-0550 ext 6204 Digicel 619-1260 ext 6204
Ministry of Water and Housing	Contact: Mr. Shawn Cameron DID 906-8434

Next Steps

The development of RFPs for PBXs is to be coordinated through CITO to ensure that all PBX acquisition abides by the best practices outlined above and to ensure cost efficiency.

CITO is developing additional standards for ICT acquisitions and policy. These standards will be posted for downloads on its website www.cito.gov.jm. Additionally, Permanent Secretaries, Heads of Agencies and Procurement Officers will be officially notified of ICT standards as they are develop.



OFFICE OF THE PRIME MINISTER

To: Cabinet Secretary
Financial Secretary
Permanent Secretaries
Chief Executive Officers

From: Daryl Vaz
Minister without Portfolio with responsibility for Information and Telecommunications *DV*

Date: 5th March 2010

Subject: Procurement of Private Branch Exchange (PBX) for Ministries and Agencies

We are at a very critical juncture in the rationalization of the Public Sector and given the fiscal constraints affecting all Ministries, Departments and Agencies, a hold is to be placed on the procurement of all PBX equipment for Ministries, Departments and Agencies, until further advised.

It has been brought to my attention that various Ministries and Agencies have been purchasing their own PBX systems without collaborating generally to effect the cost savings that could be realized government-wide. This has resulted in excess capacity residing in Ministries at exorbitant costs which could be rationalized to serve a wider cross-section of the Government, resulting in tremendous cost savings and general efficiency. Where the system already exists, a careful review will be conducted by CITO to determine capacity and the potential for shared use by other Entities.

A more holistic approach will be adopted to address this matter within the next two weeks and all Ministries will be advised accordingly. In this regard, any Ministry, Department or Agency currently in the process of procuring such a system, the matter should be referred to CITO for review.

Please bring this matter to the attention of all Departments and Agencies that fall under your respective Ministries.