



CENTRAL BANK OF  
TRINIDAD & TOBAGO

# Payments Quarterly

Payments Quarterly is a newsletter on developments in the Payments System in Trinidad and Tobago

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suggestions please contact the  
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**In this edition of Payments Quarterly**, we continue to highlight the work of member institutions represented on the Payments System Council. The feature article is from the Chamber of Industry and Commerce on the use of electronic payments by businesses in Trinidad and Tobago.

In the Operators' Spot, we include an article by the Central Bank of Barbados explaining the role and function of its Real Time Gross Settlement System called CBRTGS; and another by our local payments system operator, the Trinidad and Tobago Interbank Payments System Limited (TTIPS), providing a brief update on system developments to the Automated Clearing House (ACH) in 2011.

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## The Chamber Speaks on... The Use of Electronic Payments by Businesses in Trinidad and Tobago



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Over the last several years, the methods of settling payments for goods and services have evolved from mainly cash and cheques to modern payments systems requiring real-time processing. Today there are a plethora of electronic payments systems which include the widely-used credit cards and debit cards.

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In Trinidad and Tobago, there are two major automated systems for the clearance and settlement of electronic payments. These are the Real Time Gross Settlement (RTGS) system for large-value payments (\$500,000 and over) and the Automated Clearinghouse (ACH) for smaller retail payments.

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For businesses, electronic payments have generated cost savings which, in turn, have led to improved efficiency and profitability. Administrative resources normally required to process invoices and cheques can now be put to alternative use. Instant purchasing is also facilitated through the use of the credit card. In the end, business has the potential to attract more customers and so gain an edge over its competitors.

Whilst the usage of ACH, in particular, has increased over the years, mainly for payroll processing, given the benefits of the use of electronic payments to businesses, more widespread use of all its capabilities should be achieved. A survey, conducted over the period November 11 to 17, 2011 by the Trinidad and Tobago Chamber of Industry and Commerce among its members with respect to the use of the RTGS and ACH payments systems, revealed that some 21 per cent of them use neither of the two (2) systems. Of those, many were comfortable with the use of cash, cheques and wire transfers. Moreover, in the case of the small and medium-sized enterprises (SMEs), payments were not considered to be of sufficient volume or magnitude to warrant the use of these electronic systems.

It is instructive to note, that in businesses where these systems are being utilised, 55 per cent and 15 per cent, respectively, use the ACH and RTGS, while the remaining 9 per cent use both systems. A number of significant benefits were identified by the respondents, including:

## The Chamber Speaks on...The Use of Electronic Payments by Businesses in Trinidad and Tobago (Continued).

- Convenience;
- Speed – same day transfer to any payee;
- Security – no cash deposits, less risk;
- Ease of making payments, especially payrolls;
- Easy to track – audit trail; and
- Accuracy of transactions.

However, as with any other payments systems, there are challenges and barriers which may act as deterrents to the widespread use and popularity of the ACH and RTGS. Many of the respondents, especially the smaller businesses, identified cost as the major barrier. This included the reject fee for direct debit transactions, service charges by the banks and the transfer fee to be paid by the originator. These fees are relatively high and, therefore, prohibitive for small businesses.

There is a concern that the systems are not entirely paperless, as written instructions, which are time-consuming to issue, have to be sent, in some cases, to the banks. Businesses have also identified the strict deadline time for processing as a challenge especially given the unreliability of the internet service. Of note, is the lack of confidence respondents had in the security of these systems, hence there tended to be low trust in their accuracy

and confidentiality. Businesses, therefore, were not always willing to divulge bank account information.

Lack of information was also seen as a major barrier to the use of electronic banking systems. Public education needs to be improved, informing businesses through various media on the use and benefits of the ACH and RTGS. This education should also aim to have the businesses increase their confidence in the security of these systems.

It was noted by certain respondents that the Government, and more particularly, the Board of Inland Revenue, does not use the electronic payments systems. This, they felt, was quite unfortunate as it would have facilitated the payment of numerous miscellaneous taxes. The Chamber is aware that legislation to allow for e-payments and the Government's use of these systems is far advanced and should be tabled in Parliament in the near future, as the relevant amendments are currently being made to the Exchequer and Audit Act. However, the Electronic Transactions Act, which was assented to in April 2011, requires proclamation to bring it into effect.

Going forward, a number of recommendations were made by respondents as to the role the commercial

banks and Central Bank can play in encouraging the wider use of electronic payments options and engendering greater confidence in their use by businesses. Great emphasis was placed on an education campaign to provide more awareness on, inter alia, the real-time benefits, the savings factor, security controls and the reliability and accuracy of these systems. A further incentive to encourage the use of the systems is their impending implementation at Government agencies and state enterprises.

Additionally, it was suggested that the system should be more flexible in terms of the types of accounts that can be credited and that fees to service these accounts should be reduced. There should also be an extension of the processing times by commercial banks.

In the final analysis, the use of electronic payments constitutes best practice and businesses must be encouraged to make use of this modern technology given the significant benefits to be derived. The Government, however, needs to put proper laws and policies in place to ensure the protection of all online and electronic transactions. ■

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## OPERATORS SPOT

### The Central Bank of Barbados Real Time Gross Settlement System (CBRTGS)

On October 11, 2002, the Central Bank of Barbados introduced the Real Time Gross Settlement System (CBRTGS).

The concept of Real Time Gross Settlement (RTGS) is not new; it is being used by central banks in most developed economies. These systems are intended to complement deferred net settlement systems, to eliminate settlement risk and to provide immediate and irrevocable use of incoming funds of participating commercial banks and other financial institutions. The RTGS systems provide opportunities for Banks to offer

improved services to both the corporate and individual customers.

The Central Bank Real Time Gross Settlement System (CBRTGS) facilitates interbank straight through processing of large-value and other urgent interbank payments. These payments are usually time sensitive and for large-value transactions. As in other countries, the CBRTGS co-exists with other computer-assisted settlement systems which are used for less urgent low-value transactions. These transactions may be cheques or direct debits.

The CBRTGS meets international standards for safety, soundness and efficiency of payment systems which enhances the overall image of the Barbados financial sector both on the domestic and overseas markets. In addition, the availability and soundness of its legal and regulatory framework support Barbados's promotional efforts as a jurisdiction in which electronic commerce can thrive.

#### Benefits

The CBRTGS meets the standards set by the Bank for International Settlements (BIS). It provides stability, efficiency and

## Operators Spot: The Central Bank of Barbados Real Time Gross Settlement System (CBRTGS) (Continued).

removes the settlement risk associated with large-value and other time sensitive transfers. It also provides immediate legal and irrevocable final transfer of funds between participants and their customers. These payment transactions are settled immediately in the accounts of the Central Bank.

### Foreign Payments

The CBRTGS is dependent on payment instructions being communicated through the Swift network, which is an international, electronic messaging system. An example of a wire transfer is when a customer of Bank A in the U.S.A. requests the Bank of America to pay US \$1,000,000 to A.G. Legal Services for the purchase of a property. The Bank of America will send a swift message, an MT103 (customer transfer) to the Central Bank of Barbados instructing the Central Bank to pay US \$1,000,000 into the bank account of A.G. Legal Services on behalf of the customer of Bank A.

The CBRTGS is maintained in Barbados currency. All foreign currency transactions must therefore be converted to Barbados

dollars using the relevant exchange rate. In Barbados, our US dollar exchange rate is fixed at US\$1 = BDS\$2.00. However, there is a commission charged for the transaction, so in our example, BDS \$1,997,500 will be paid into A. G. Legal Services Local Bank account and \$2,500 will be credited to the Central Bank of Barbados Income Account Commission and Fees.

### Local Payment

In Barbados, the Barbados Stock Exchange, Citicorp (Barbados) Ltd., The Accountant General and all commercial banks are participants and have access to the CBRTGS through web stations via a Virtual Private Network (VPN). This is similar to that used by individuals to access the internet. Each participant of the CBRTGS has a Bank Identifier Code (BIC) which uniquely identifies each participant registered in the system.

The Accountant General pays most of the salaries for Government employees through the RTGS system. In addition to this, payments for Government of Barbados Treasury Bills are made by

commercial banks for their own account as well as those of their customers. The proceeds from the maturity of Treasury Bills are also done through the RTGS. On a daily basis, the Central Bank of Barbados handles about 250 transactions through the RTGS.

The Central Bank of Barbados is currently updating its RTGS Swift and General Ledger systems. The upgraded versions are expected to become operational by the first quarter of 2012.

### Conclusion

The CBRTGS allows the Accountant General to monitor intraday activity and balances of all Government accounts in real time and to do transactions directly, rather than have to request services from other banks. The CBRTGS also safeguards Barbados's Financial Services Sector against systemic, credit, settlement and operational risks, which are similar to those existing in developed economies. ■

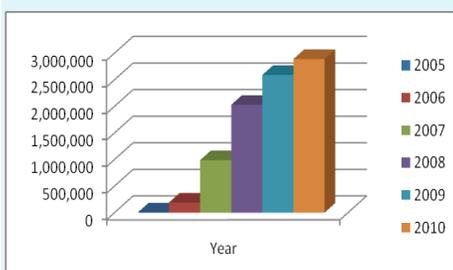
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## Trinidad and Tobago Interbank Payments System (TTIPS)

Over the last 10 years change in the payments industry has increased significantly, particularly with the introduction of the Real Time Gross Settlement System and the Automated Clearing House (Chart 1). One of the underlying drivers of change in the ACH has been the development and proliferation of new technologies to enable significant improvements in efficiency and effectiveness, for both participating financial institutions and their customers.

Chart 1: ACH Volumes, 2005 – 2010



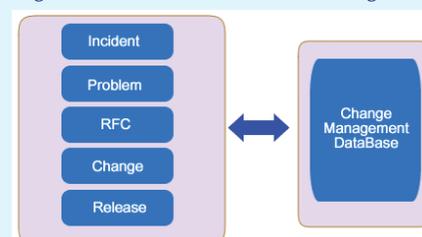
To keep pace with the modernization and changes in the payment system, TTIPS will be upgrading its processing platform in December, 2011. This migration reflects TTIPS ongoing commitment towards providing system participants with a robust and efficient application, with up to date capabilities including:

- Internet Browser updates – Enabling of Internet Explorer version 7 & 8;
- Enhanced User Interface – User Dashboard and messaging;
- Biometric Security – Device upgrades;
- Disaster Recovery – Enhancement of backup devices; and
- Batch Rejections – Rejection of non-conformity for either entire file or erroneous batch (under consideration).

A rigorous User Acceptance Testing phase is envisioned; however, TTIPS is focusing on ensuring that the transition process is seamless and expeditious as possible.

Another facet of modernization was the implementation of a participant Service Desk. The purpose of the service desk will be to 'log' "service requests" or incidents, from ACH network participants by category, priority and urgency. This incident management system will provide TTIPS with the ability to monitor the efficiency of the provision of timely responses and resolution of incidents and queries affecting members. The service Desk differs from a call centre or help desk as it uses a broader, more user-centric approach, which will allow the integration of business processes into service management (Diagram 1).

Diagram 1: Service Desk – Incident Management



### Trinidad and Tobago Interbank Payments System (Continued).

By definition a Service Desk is a primary service management capability, and is part of the organization's corporate governance strategy, providing a single point of contact:

- to meet the communications needs of both the users and the organization;
- to satisfy agreed objectives; and
- to provide incident tracking and reporting.

Service requests can be issued via the service desk website, e-mail and by telephone (during office hours). A unique "Incident Tracking Number"

will be issued to each service request and is automatically assigned to each service request (supplied either by the service desk or TTIPS to the originator of the service request). Users can submit a service request, view the service history, or view the knowledge base for assistance in finding solutions to already resolved issues and "known" problems.

However innovation has not arrived without challenges. Safety and security are an integral part of the customer value proposition and given the reputational, systemic and financial impact of risk

& fraud, the management of the ACH environment is aligned with international best practice, with the inclusion of an ACH Risk strategy and revised Operating Rules & Regulations.

The end result of these changes will be a payment system which aligns risk mitigation and operational effectiveness strategies, while promoting transparency and improved customer value. ■

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## Payments Glossary

Here are 6 terms applicable to the Payments System:



1. Real-Time Gross Settlement	The continuous (real-time) settlement of funds or securities transfers individually on an order by order basis (without netting).
2. Clearing	Refers to the process of verifying that the payer has the money to make the payment and that the payment method by which the transaction is effected is valid. It always precedes the settlement process.
3. Settlement	Refers to the actual exchange of value from the payer to the beneficiary and is usually facilitated through financial institutions.
4. Automated Clearing House (ACH)	An electronic clearing system in which payment orders are exchanged among financial institutions, primarily via magnetic media of telecommunication networks, and handled by a data-processing centre.
5. E-payment	A payment transaction in which monetary value is transferred electronically or digitally between two entities as compensation for the receipt of goods and services.
6. E-commerce	Refers to the buying and selling of products or services over electronic systems such as the Internet and other computer networks.

Source: *A Glossary of Terms used in Payments and Settlement Systems*, Committee on Payment and Settlement Systems, Bank of International Settlements, March 2003.

<http://wiki.triastelematica.org/index.php/E-payment>.

[http://en.wikipedia.org/wiki/Electronic\\_commerce](http://en.wikipedia.org/wiki/Electronic_commerce).

### Safe-tt, ACH and Cheques Volume Meter

Safe-tt, ACH and Cheques statistics 2009-2011

	2009	2010	2011	2010	2011
				Oct - Dec	Oct - Dec
<b>Safe-tt</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.01</b>	<b>0.01</b>
<b>ACH</b>	<b>2.59</b>	<b>2.89</b>	<b>3.13</b>	<b>0.77</b>	<b>0.85</b>
<b>Cheques</b>	<b>9.74</b>	<b>9.65</b>	<b>9.46</b>	<b>2.49</b>	<b>2.44</b>
<b>Total</b>	<b>12.38</b>	<b>12.59</b>	<b>12.64</b>	<b>3.27</b>	<b>3.30</b>

NB: Volumes in Millions

Source: Central Bank of Trinidad and Tobago, Trinidad and Tobago Interbank Payments System Ltd.

If you require any further details or would like to offer any suggestions, please contact the Payments System Department at the Central Bank of Trinidad and Tobago at

Phone number: 1 (868) 625-4835 ext. 2719; or send an email to: [rtgs@central-bank.org.tt](mailto:rtgs@central-bank.org.tt)