

# Collateral Matters

A Banking Law Newsletter

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## Down to the Wire: Modernizing Canada's Payment Systems

By Alyssa Gebert and Timothy Jones\*

Launched in 1999, the Large Value Transfer System (“LVTS”) is Canada’s system for the transfer of large electronic wire payments between Canadian financial institutions.<sup>1</sup> The *Payment Clearing and Settlement Act*<sup>2</sup> provides the legal framework to support the functioning of the LVTS. While the Bank of Canada regulates the flow of payments and settlement positions through the LVTS, Payments Canada is responsible for administering the daily operations of the system. In 2014, 7.9 million LVTS transactions accounted for more than \$38 trillion in value.<sup>3</sup>

Despite its importance to the Canadian banking system, the LVTS is based on outdated technology from the mid-1990s. Currently, many transactions are slowed or postponed by bank wire difficulties, causing headaches and inefficiencies for Canadian businesses and their advisors. Noting that Canada’s payment system lags behind other jurisdictions, Payments Canada has undertaken an initiative to modernize Canada’s payments ecosystem and replace the LVTS.<sup>4</sup> This article discusses some problems with the LVTS and explores what a replacement system could look like.

The LVTS is based on end-of-life mid-nineties information technology which cannot be easily changed or reprogrammed. The technology must be replaced in order to harness advances in technology that would allow for a

system that is faster, cost-effective and better able to meet participants’ needs. The current system limits throughput to two to three payments per second, which leads to morning backlogs and “peak period delays.” Further, there are limited hours in which wires can be processed, namely during “banker’s hours,” and not on weekends or holidays.<sup>5</sup>

In 2015, Payments Canada began its initiative to modernize Canada’s payment systems, including the LVTS. Payments Canada’s modernization strategy identified eight needs of a modern payments system: faster payment options; data-rich payments; transaction transparency; easier payments; cross-border convenience; activity-based oversight; open and risk-based access; and platform for innovation (the “**Vision**”).<sup>6</sup> Subsequently, in November 2016, Payments Canada proposed five initiatives for advancing the Vision: build a new core clearing and settlement system; establish a real-time capability; enhance automated funds transfer; align with global regulatory standards; and modernize the rules framework.<sup>7</sup>

Given the nature of the technology behind the LVTS, the challenge of introducing changes to the system and the importance of the LVTS to the Canadian financial system, Payments Canada has prioritized replacing LVTS with a new Core Clearing and Settlement System.<sup>8</sup>

<sup>1</sup> Neville Arjani and Darcey McVanel, “A Primer on Canada’s Large Value Transfer System”, Bank of Canada, 2006, [http://www.bankofcanada.ca/wp-content/uploads/2010/05/lvts\\_neville.pdf](http://www.bankofcanada.ca/wp-content/uploads/2010/05/lvts_neville.pdf)

<sup>2</sup> *Payment Clearing and Settlement Act*, S.C. 1996, c. 6, Sch.

<sup>3</sup> C.D. Howe Institute, “Money in Motion: Modernizing Canada’s Payment System”, Commentary No. 432: [https://www.cdhowe.org/sites/default/files/attachments/research\\_papers/mixed/Commentary\\_432.pdf](https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/Commentary_432.pdf)

<sup>4</sup> Payments Canada, “Industry Roadmap and High Level Plan”, 2016, [https://www.payments.ca/sites/default/files/roadmap\\_whitepaper\\_en.pdf](https://www.payments.ca/sites/default/files/roadmap_whitepaper_en.pdf) (“White Paper”).

<sup>5</sup> *Ibid* at 14.

<sup>6</sup> Payments Canada, “Modernizing Canadian Payments: A Vision for the Canadian Payments Ecosystem”, <https://www.payments.ca/sites/default/files/vision-canadian-payments-ecosystem-reader.pdf>

<sup>7</sup> *White Paper*, *supra* note 4 at 10.

<sup>8</sup> *Ibid* at 16.

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Payments Canada proposes that a new Core Clearing and Settlement System might have the following characteristics:

- Settlement on the books of the Bank of Canada
- Clearing of wire payments
- Best-in-class resiliency
- ISO 20022 standards, with backwards compatibility
- Settlement Optimization Engine replacing the Automated Clearing Settlement System
- Liquidity Saving Mechanisms
- Payments Canada will continue as the Operator and Application Provider<sup>9</sup>

Further, Payments Canada envisions that both the LVTS and the Automated Clearing Settlement System will be replaced by the new Core Clearing and Settlement System.<sup>10</sup>

Although Payments Canada notes the potential disruptive force of blockchain or distributed ledger technology (“**DLT**”), the next iteration of LVTS will not incorporate this technology. Payments Canada’s stated rationale for this is that “any additional risks DLT could introduce are not yet well defined or understood and, as a result, this technology

will not be market ready for the critical payments systems for several years.”<sup>11</sup>

While the exact model of the new Core Clearing and Settlement System has not yet been determined, the new system could be similar to Interac’s email money transfers, which is perhaps the best current example of a real-time, secure and flexible payment settlement system. Payments Canada has indicated that its initiative to modernize Canada’s payment systems will be implemented over the next few years, although the implementation of the new Core Clearing and Settlement System may occur as soon as 2018.<sup>12</sup>

Limited information is currently available to assess the impact of these proposed changes on the legal obligations of the various participants in Canada’s payment systems. However, Payments Canada’s rules, standards and legal framework will be reviewed and renewed to support the modernization initiative, and it is likely that the underlying legislation will also need to change.

In the interim, businesses, banks, and their counsel will continue to deal with the logistical complexities – and occasional frustrations – that result from using the LVTS to process large payments on tight deadlines.

<sup>9</sup> Ibid at 18.  
<sup>10</sup> Ibid.  
<sup>11</sup> Ibid at 15.  
<sup>12</sup> Ibid at 17.

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