CDS Clearing and Depository Services Inc.

REVISED PROPOSAL:

PROPOSED SIGNIFICANT CHANGE TO ELIMINATE FEE REBATE MODEL
and
PROPOSED AMENDMENTS to ELIMINATE NETWORK CONNECTIVITY FEES and to ELIMINATE REPORT FILE TRANSMISSION FEES

NOTICE AND REQUEST FOR COMMENT

I. DESCRIPTION OF THE PROPOSED CHANGES AND BACKGROUND

A. Background to this Revised Proposal

In December 2019, the principal regulators of CDS Clearing and Depository Services Inc. ("**CDS**") published a Notice of Request for Comment concerning proposed amendments which, if approved, would have resulted in the elimination of fee rebates and the removal of network connectivity fees (the "**Original Application**"). CDS received nine comment letters responding to the Original Application as well as additional informal feedback from participants and regulators.

In response to feedback received, CDS has made changes resulting in this amended proposal (the "**Revised Application**"). We therefore withdraw the Original Application published by CDS's principal regulators on December 19, 2019.

B. Executive Summary

CDS is proposing to make three changes to the existing fee model. The first two changes are the same as those proposed in the Original Application. The first and most significant change is the proposal to modify its fee model by eliminating the rebates that are paid annually to participants based on their respective use of CDS services. The second change is the elimination of network connectivity fees currently paid by participants. The third change, which was not part of the Original Application, is the elimination of fees charged for report file transmissions for reports that are generated by CDS at the request of participants to be used for certain business processes. This third change is expected to result in approximately $1 million of savings to participants annually.

The elimination of the rebates is being proposed to ensure that the significant investment required to modernize CDS technology now, and to ensure adequate funding of ongoing future technology upgrades, can be made while enabling TMX Group Limited (**"TMX"**) to earn an appropriate rate of return on its capital investments. Modernizing CDS's technology, now and on an ongoing basis, is integral to ensuring that this systemically important clearing house continues to operate safely and efficiently for Canada's capital markets.

The proposed fee changes will impact participants differently. When all changes in this proposal are considered as a package, approximately one-third of all participants would have an overall decrease in their CDS billings (based on 2018, 2019 and 2020 results). Heavier users of CDS core services (i.e. greater than $1 million in annual CDS core fees) would have an overall increase in their CDS fees after these changes are made.

1. Changes made since the publication of the Original Proposal

This Revised Application contains two main changes to the Original Application:

- *Additional Fee Reduction*: As stated above, CDS proposes to cease charging fees for report file transmissions
- *Timing of Rebate Elimination*: Rebates will be eliminated only after the post-trade modernization ("**PTM**") project goes live

C. CDS's Post-Trade Modernization Project

CDS's PTM project will modernize CDS's critical infrastructure by replacing CDS's principal processing system, known as CDSX, and supporting systems. Moving to a modern, scalable, reliable, and more flexible technology platform is an important and significant project for CDS and its stakeholders. CDS has reviewed alternatives to fund this essential investment and to ensure funding for ongoing investments in critical infrastructure. We have determined that eliminating CDS's fee rebates is a fair and appropriate change to make in order to fund the PTM project and to fund future technology projects, while meeting TMX's minimum expected internal rate of return (**"IRR"**) for the CDS business.

D. Eliminate Rebates

CDS currently provides two types of rebates to its participants. Both rebate types are paid on an annual, pro-rata basis, and are based on certain fees paid by participants. First, each year CDS shares with its participants 50% of any increase in annual revenue on clearing and other core services as compared to the adjusted annual revenues in the fiscal year ending on October 31, 2012. We refer to this rebate as the "**50/50 Rebate**". Second, each year CDS also rebates an additional amount to participants in respect of clearing services for trades of exchange-listed securities conducted on an exchange or alternative trading system. This rebate amount, which has escalated since 2012, is now capped at $4 million per year. This rebate, which we refer to as the "**Additional Rebate**", is also paid annually, on a pro-rata basis, and in arrears, based on clearing activities. <u>CDS is proposing to permanently eliminate the 50/50 Rebate and to permanently eliminate the Additional Rebate,</u> each as described below. This would mean that upon receiving regulatory approval of the Revised Application and after the PTM initiative goes live, going forward <u>CDS will no longer pay annual rebates to participants</u>.

E. Eliminate Network Connectivity Fees

CDS proposes to eliminate two types of fees that participants currently pay to connect to CDS's systems. First, participants pay monthly fees for logical units for printing and interactive sessions on the CDS mainframe; participants are charged by number of ports. These monthly fees ("**Port Fees**") are set out in CDS's fee schedule as code items 7500 to 7503 and code items 7535, 7540, and 7550, as per the 2020 CDS Price Schedule. In order to attenuate the impact on participants of eliminating CDS's rebates, CDS proposes to eliminate these port and logical unit fees. Like the rebate elimination, the Port Fees elimination is contingent on obtaining regulatory approval for the Revised Application.

Second, participants also pay monthly fees for CDS to manage the network connection between CDS and participants. CDS intends to eliminate the requirement to connect via the CDS-managed network and, instead, will allow participants to connect to CDS using their own directly-maintained connectivity. These monthly network connection fees, which we refer to as "**Network Fees**", are set out in CDS's fee schedule as code items 7530 to 7534 and code items 7536 to 7539. The Network Fees will cease to be charged to a participant as soon as the participant migrates off the CDS managed network. This migration activity is currently in progress and as at the end of 2020, approximately sixty percent of organizations have already migrated off of the CDS managed network. The majority of these migrated organizations replaced the connection at no charge by using an existing link to TMX, dedicated or internet.

1. Correction to Original Application

In the Original Application, we labelled billing codes 7535, 7540 and 7550 incorrectly. These three billing codes fall in the category of Port Fees.

F. Eliminate Report File Transmission Fees

As a new, additional concession to enable participants to obtain a further netting benefit as against the impact of the fee rebate elimination, CDS is proposing to cease charging for reports that it transmits to participants. These reports are electronic files processed by CDS that are retrieved and used for certain business processes such as reconciliation, record-keeping, and analysis. Fees for these electronic files, which we refer to as "**Report Fees**", are set out in CDS's fee schedule as code item 6170 *Outbound File*.

II. NATURE AND PURPOSE OF THE CHANGES

Note: Section II (A) in this Revised Application has not changed since it was first published in the Original Application.

A. CDS Modernization is Needed

CDS's critical infrastructure underpins the clearing, settlement and depository functions of the Canadian capital markets. The Governor of the Bank of Canada has designated CDS's principal processing system, CDSX, as systemically important to Canada's financial system. Regulatory requirements prescribe systems availability standards to ensure the smooth operation of this critical infrastructure. As the owner of CDS, TMX strongly supports the decision to modernize CDS systems in order that CDS will continue to meet performance standards required by the clearing and settlement business and monitored by regulators, including performance standards related to CDSX availability.

The PTM project is CDS's proactive replacement of the CDSX mainframe and modernization of supporting systems. The objective of the PTM project is to implement a technology platform that will ensure continued exceptional reliability and security while allowing greater flexibility for future systems enhancements. CDSX is approximately 20 years old and runs on mainframe technology that, while reliable, is expensive and resource-intensive to maintain. Software that is integral to CDSX risks being unsupported in the future given the diminishing size of the talent pool required to support the legacy software.

We believe that implementing a modern technology platform will enable CDS to make future systems changes more efficiently and with less risk as compared to implementing changes to the CDSX mainframe. The modernized system is also intended to offer a more intuitive user interface to participants, including the ability to customize report generation by participants. The new system is modular in design and is intended to enable CDS to scale the system more efficiently based on future capacity needs.

B. Elimination of Rebates will Fund Technology Development for Critical Industry Infrastructure Now and in the Future

1. Rationale for Rebate Elimination

Based on the current plan and the assumptions inherent therein, the PTM project to replace the CDSX mainframe and modernize supporting systems is estimated to cost between $120 and $135 million, and is expected to have a 10 to 15 year useful life. TMX's acquisition of CDS in 2012 assumed an IRR on the CDS business based on a forecast of future operating results for CDS and certain capital requirements, such as regulatory capital and other operating capital. The IRR was also validated based on a market-based weighted average cost of capital for TMX and this was used to test the reasonableness of using the IRR as a discount rate. There were no capital considerations for the replacement of the CDSX mainframe, or for any significant technology upgrades.

If CDS does not amend the existing fee/rebate model, after taking into account the cost of the investment in the PTM project to modernize CDS systems, CDS will not meet TMX's minimum expected IRR. Incurring the costs to fund this investment in critical infrastructure is a significant change that was not contemplated at the time the CDS fee model was established in 2012. While we acknowledge the impact of this proposal on participants, CDS believes that eliminating the rebates is the most appropriate and effective alternative in order to ensure adequate funding of the PTM project and of future technology upgrade projects on an ongoing basis. Eliminating the rebates will provide the funds necessary to invest in CDS infrastructure and systems now, and in the future, while impacting participants' fees in a manner that is, according to CDS's analysis, both fair and equitable. The impact on participants, as discussed below in section III, will be offset in part by the elimination of network connectivity fees, and the elimination of Report Fees.

2. Effect of Eliminating the Rebates

The aggregate value of rebates paid by CDS to participants fluctuates from year to year. Due to changes in clearing and other CDS core services revenue, the 50/50 Rebate amount varies from year to year. For the five-year period from 2016 to 2020 inclusive, CDS rebated an average of $6.0 million per year for the 50/50 Rebate. The Additional Rebate value is a fixed amount (as set in CDS's recognition orders) that has increased from 2013 to 2016. In 2016, the Additional Rebate had reached its cap of $4 million per year. The total average annual rebate of $10.0 million paid by CDS for the five-year period from 2016 to 2020 inclusive represents 10% of CDS's consolidated (pre-rebate) revenues averaged for the same period.

C. Removal of Network Connectivity Fees Softens the Impact of Rebate Elimination

1. Port and Logical Unit Fees

This proposal, if approved, would eliminate the monthly Port Fees listed as code items 7500 to 7503 and code items 7535, 7540, and 7550 in the CDS fee schedule. It is common practice for financial infrastructure providers such as clearing houses and exchanges to charge access fees to participants. These access fees are charged for the resources used by the financial infrastructure provider to ensure that the access points between participants and the infrastructure's systems are maintained. Technology staff at CDS work to ensure seamless and ongoing connection into the CDS systems. At CDS, these charges are based on the number of logical units used by a participant. In 2018, participants paid $1.36 million in Port Fees.

CDS is proposing to eliminate the Port Fees in recognition that some offset to the elimination of rebates would benefit participants, in particular those participants that are lighter users of CDS core services. CDS proposes to eliminate the Port Fees at the same time that the rebate elimination is implemented, after the PTM project goes live. (See section IV - *Implementation of the Changes*.) Elimination of the Port Fees is contingent on CDS obtaining approval for the rebate elimination.

2. Managed Network Service Fees

As part of the transition to the modernized system, CDS is moving participants off of the current network that connects CDS to its participants, and will have participants connect to CDS through their current network providers. This change in network connectivity will result in the elimination of the Network Fees charged to participants (code items 7530 to 7534 and code items 7536 to 7539 in the CDS fee schedule) and should not result in any additional network costs to participants. Modernizing CDS's systems will allow CDS and participants to reap the benefits that will come from moving off of the current network and will allow participants to use their own network providers to connect to CDS. We acknowledge that this change will relocate the demarcation point from participant premises to CDS premises; however, since most participants already have their own connectivity to TMX facilities, we understand that this change should not be difficult or costly to participants. In 2018, participants paid $1.48 million in Network Fees.

CDS intends to complete the cut over from the CDS managed network to participants' networks in Q2 2021. CDS has already migrated approximately sixty percent of the organizations off of the CDS managed network. Performing this network connection change in advance of the PTM project implementation has the benefit of ensuring that participant network connections are running smoothly in advance of, and that network connectivity work will not distract resources from, the implementation of the CDSX replacement. CDS stops charging the Network Fees as soon as the transfer of network connectivity management from CDS to the participant is complete. When all of the participants have moved off of the CDS-maintained connectivity network, charging for code items 7530 to 7534 and code items 7536 to 7539 in the CDS price schedule will be eliminated formally. Elimination of the Network Fees is not contingent on CDS obtaining approval for the rebate elimination.

D. Elimination of Report Fees is an Additional Benefit to Participants

In response to comments received on the Original Application, CDS analyzed participant charges to determine whether any further concessions could be provided that would serve to offset some of the impact of the rebate elimination. As a result of this review, CDS is now proposing to cease charging for the reports that it creates for participants – identified as code item 6170 in the CDS fee schedule. PTM is expected to reduce the need for CDS to create static reports, as participants will be in a position to perform their own analysis and create their own reports. Nonetheless, CDS has received feedback that some participants want CDS to continue to produce these existing report files, either on a transitional or permanent basis. To respond to this feedback, CDS will continue to create and transmit these files but at no charge.

III. IMPACT OF THE CHANGES

Note: Section III (A) in this Revised Application has not been changed since it was first published in the Original Application. Introducing the Report Fees Elimination, while substantive in aggregate, does not meaningfully change the categorization of impacted participants in section III (A)(1) and III (A)(2) below.

A. Impact to Participants

CDS is proposing the rebate elimination and partial offset after having determined that this change is a fair and equitable solution to obtain the funding for current and ongoing technology improvements that are needed to ensure the sustainability and efficiency of CDS. Each participant will be impacted differently by the proposed changes. When the rebate elimination and removal of network connectivity fees (i.e. Port Fees and Network Fees) are considered in the aggregate, approximately one-third of CDS participants will see a net reduction in their annual CDS billings. This one-third is generally found within the group of participants that already have CDS billings that are lower than other CDS participants (ie. those participants with CDS billings of less than $1 million per year). More specifically, participants will be impacted as follows:

1. Participants with Annual CDS Billings of less than $1 million

Over 74% of CDS participants (67 participants) paid less than $1 million per year in CDS fees in 2018 (the **"Lesser Fees Segment"**). For this Lesser Fees Segment, when taken in the aggregate, the impact of the rebate elimination is fully offset by the elimination of the network connectivity fees.

Approximately 50% of participants in this Lesser Fees Segment (34 participants) will each see a net reduction in annual CDS billings. Of the remaining 33 participants in this Lesser Fees Segment, based on 2018 billings, CDS has identified the participants who CDS estimates will be impacted most adversely. There are four such participants (out of 67) who will have an increase to their CDS billings of 11 to 13 percent. This translates to an annual increase of between $10,000 and $45,000, depending on the participant. Of the Lesser Fees Segment, 19 participants would fall within a group that will be adversely impacted by an approximate increase of 5 to 10 percent, an overall annual increase of $300 to $68,000, depending on the participant.

To summarize, of the 67 participants[1] with CDS billings of less than $1 million in 2018, we expect fees to change as follows if this proposal is approved and fully implemented (based on 2018 activity levels):

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[1] The Canadian Derivatives Clearing Corporation (CDCC), an affiliate of CDS, is a participant in this segment. CDCC is charged fees in the same manner as non-affiliated participants. CDCC will experience a fee increase on its CDS billings if this proposal is approved.

- 4 participants: fees increase more than 10%
- 19 participants: fees increase between 5 and 10%
- 9 participants: fees increase by less than 5%
- 1 participant: no change
- 34 participants: fees decrease

2. Participants with Annual CDS Billings of $1 million or greater

There are 23 participants whose CDS billings exceeded $1 million in 2018 (the **"Greater Fees Segment"**). The 23 participants in the Greater Fees Segment, in aggregate, paid fees of approximately $61.6 million (before rebates) and received rebates of approximately $8.5 million in 2018. These participants represented approximately 80% of all fees paid and approximately 85% of all rebates received by participants. The impact of the removal of the rebates is highly concentrated with these 23 participants. Further concentration occurs when considering the organizations that have more than one CDS participant in their organization. When consolidating the data of multiple participants within one organization, the top 6 organizations with CDS participants represented approximately 60% of all fees paid and approximately 74% of all rebates received. The Greater Fees Segment is comprised mainly of Schedule 1 banks, large domestic dealers, and participants providing correspondent clearing services.

To summarize, of the 23 participants with CDS billings of more than $1 million in 2018, we expect fees to increase as follows if this proposal is approved and fully implemented (based on 2018 activity levels):

- 1 participant: more than 18%
- 5 participants: 13 to 18%
- 10 participants: 5 to 10%
- 7 participants: less than 5%

3. CDS's Fees are Among the Least Expensive Globally

CDS submits that eliminating these rebates is appropriate because its fees are, and after the rebate elimination will continue to be, among the least expensive globally. In a report prepared for CDS by an external consultant in 2019, of clearing houses globally, CDS was shown to have among the lowest fees when compared to eleven peer clearing houses (central counterparties and central securities depositories). This report has been provided to CDS's regulators and an executive summary of the report has been posted for CDS participants on the PTM project portal.[2] CDS's posted fee schedule was the basis for this analysis. This benchmarking, therefore, excluded the impact of annual rebates paid to CDS participants. Thus fees paid by CDS participants were in fact lower than the fees used for benchmarking purposes for the report.

[2] The executive summary of this report is also publicly available at: https://www.cds.ca/resource/en/196.

In our view, a key factor in assessing the fairness and reasonableness of this proposal is benchmarking CDS's fees against fees for comparable services in other countries. As set out in more detail in section IX below, CDS fees charged to its participants are lowest globally for fixed income clearing and settlement, and are lowest for over-the-counter equity clearing and settlement. CDS on-exchange clearing and settlement fees for equities trades are second lowest globally, with only DTCC in the U.S. coming in as a lower cost provider of clearing services to equities trades transacted on-exchange. Importantly, even subsequent to the elimination of the rebates, CDS's position as one of the lowest cost providers of clearing and settlement services in the world, would remain unchanged. CDS participants would continue to benefit from some of the most cost-effective clearing house services in the world, after the fee rebates are eliminated.

B. Impact to CDS

CDS paid total rebates of $10.1 million for 2018. This represents 10% of CDS's consolidated (pre-rebate) revenues in 2018. As set out above, the elimination of the network connection charges (Port Fees and Network Fees) to participants that receive the rebates equals approximately $2.84 million. In addition, other entities that are not participants will also cease to pay the Network Fees, resulting in an additional approximate $0.5 million decrease in revenue to CDS. The new Report Fees elimination is expected to save participants approximately $1.0 million in charges annually (based on 2019 and 2020 data). Thus, while the total average annual rebate for the five-year period from 2016 to 2020, inclusive, was $10.0 million, the offsetting effect of the elimination of the network connectivity charges to all entities plus the offsetting effect of the elimination of the Report Fees, is that the net positive impact to CDS would be approximately $7.2 million (based on 2018, 2019 and 2020 data). The total average annual rebate of $10.0 million paid by CDS for the five-year period from 2016 to 2020 inclusive represents 10% of CDS's consolidated (pre-rebate) revenues averaged for the same period.

CDS expects that eliminating the rebates will also have the effect of increasing CDS's EBIT margin to a level that is closer to the average of its global peers that have similar ownership structures. Importantly to TMX as the parent company to CDS, it is anticipated that eliminating the rebates, network connectivity fees and Report Fees will result in the CDS business meeting TMX's minimum expected IRR (discount rate) on capital. Also, this would establish an appropriate funding model for existing and future technology investment. CDS is of the view that it is both commercially appropriate and in the public interest to permit CDS to set fees at a level that provides TMX with an appropriate rate of return.

C. Comparison to PFMIs

This proposal is consistent with the CPMI-IOSCO Principles for Financial Markets Infrastructures (**"PFMIs"**)[3]. For example, one of several key considerations described in Principle 21 - *Efficiency*

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[3] Published in April 2012 by the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO).

and Effectiveness is the notion that a financial market infrastructure (**"FMI"**) should be designed to meet the needs of its participants, in particular with regard to the use of technology and procedures. Paragraph 3.21.2 in the PFMIs provides that, in designing an efficient system, an FMI should consider the practicality and costs for participants and that the FMI's technical arrangements should be sufficiently flexible to respond to changing demand and new technologies. We submit that the PTM project is essential to ensure that CDS is well positioned to adapt to both changing market demands and to rapidly changing technologies. We submit that the proposed fee changes would allow CDS to continue as a highly efficient, and cost effective, FMI operator, now and in the future.

IV. IMPLEMENTATION OF THE CHANGES

CDS is changing the timing of the rebate elimination in response to feedback on the Original Application. CDS is now proposing that rebates will be eliminated only after the PTM launch, and that any accrued rebates will be paid to participants immediately after the PTM launch. As CDS has confirmed that it will delay the implementation of the rebate elimination until after PTM has gone live, there will no longer be a phase-in of the rebate elimination. We describe the particulars of implementation below.

A. Network Fees Elimination (Code Items 7530 to 7534 and Code Items 7536 to 7539)

CDS will cease to charge the Network Fees on a participant-by-participant basis as soon as the cutover from the CDS-operated network to a participant's network has been completed. CDS is currently in the process of performing these migrations and expects all migrations to be complete by the end of Q2 2021. The Network Fees elimination is not contingent on the approval of the rebate elimination.

B. Rebate Elimination

CDS is now proposing to eliminate the fee rebate only after the PTM launch. Immediately after the PTM launch, CDS will eliminate the rebate fee model and at the same time CDS will pay any accrued rebates to participants.

C. Port Fees Elimination (Code Items 7500 to 7503 and Code Items 7535, 7540, and 7550)

The Port Fees will be eliminated after the PTM launch, at the same time that the rebate is eliminated. CDS proposed the elimination of these fees as an offset against the impact of the rebate elimination, thus these monthly fees will cease to be charged at the same time that the rebate elimination is implemented. The Port Fees elimination is contingent on the approval of the rebate elimination.

D. Report Fees Elimination (Code Item 6170)

The Report Fees will be eliminated at the same time that the Port Fees elimination and rebate elimination are implemented. CDS is proposing the elimination of these fees as an offset against the impact of the rebate elimination. The Report Fees elimination is contingent on the approval of the rebate elimination.

E. Implementation Timeline Summary

- Ongoing to Q2/21: Network Fees for a participant will be eliminated as soon as the participant has migrated off of the CDS-managed network connection.

- Immediately after PTM launch (anticipate completion by Q4/21 to Q1/22):
  - Rebate model eliminated
    - Accrued rebates paid
  - Port Fees eliminated
  - Report Fees eliminated

V. DEVELOPMENT OF THE CHANGES

A. Principles Considered

In developing the proposal, CDS took into account the key principles that underpin the framework for regulatory review of CDS fees, as set out in Multilateral CSA Staff Notice 24-313 (the **"CSA Staff Notice"**)[4]. These principles include ensuring that there is fair access to CDS's services and an equitable allocation of fees that are applied on a non-discriminatory basis. These principles also recognize that CDS's fee structure must be commercially reasonable while providing CDS with sufficient resources to provide clearing, settlement and depository services at a level which satisfies CDS's performance standards.

The overall objective of the review of CDS fees by our principal regulators is to determine whether the proposed fees are fair, equitable, and appropriate, and whether the fees are in balance with the need for CDS to maintain sufficient resources to provide critical functions.[5] The CSA Staff Notice lists a number of factors that the Canadian Securities Administrators will take into account when reviewing CDS fee proposals to understand whether the desired outcomes are being met, including:

- the potential impact of the proposed fee change to the safety and efficiency of, and competition within, Canada's capital market;
- the anticipated impact to CDS's customers;

[4] (2015), 38 OSCB 4458. *Multilateral CSA Staff Notice 24-313 CSA Staff's Review of Proposed Amendments to Fee Schedule of The Canadian Depository for Securities Limited (CDS Limited) and CDS Clearing and Depository Services Inc. (CDS Clearing) (collectively, CDS)*. May 14, 2015.
[5] Ibid p. 4459.

- views expressed by customers and other stakeholders during a consultation;
- the reasons for the fee change;
- how other businesses and revenues of CDS would be impacted;
- the projected change in revenue for CDS;
- historic and projected costs of CDS in providing the particular service;
- the movement of overhead and direct costs between CDS's services, and between core and non-core services;
- how the proposed fees benchmark to fees for comparable services in other jurisdictions; and
- how the proposed fees will be rolled out and implemented.

In developing the proposal to eliminate rebates, we took into account all of these factors to ensure that we proposed a change that would balance the fairness and appropriateness of the fee change and its impact on participants, with the need for CDS to maintain sufficient resources to operate its critical functions in a commercially reasonable manner and provide TMX with an appropriate rate of return on its capital investments made in CDS. In particular, we calculated the potential impact of these changes on each participant (based on 2018 data) and have shared this information with each participant and with CDS's regulators. Aggregate impacts are provided in section III of this Revised Application. CDS took into account feedback that was provided during our extensive stakeholder consultation process prior to publishing the Original Application, as well as certain feedback received in response to the Original Application. This process is summarized in section V(B) below. Underpinning all of our analysis and activity on this matter is the benchmarking of fees globally that was prepared by an external consultant, summarized in section IX(B), which shows that, even after implementation of the proposed changes, CDS is one of the lowest cost providers, and in most cases, the lowest cost provider, of clearing and settlement services globally.

B. Consultation with Stakeholders

1. Process

a) Prior to the Original Application

CDS's Recognition Order requires that it not seek regulatory approval for fee increases on core services unless there is a significant change from current circumstances. In our view, the need to replace CDSX and the corresponding need to change the fee model to address the cost of this major systems overhaul and future significant technology upgrades, is such a significant change. The cost of the PTM project, currently estimated to be between \$120 and \$135 million, is approximately 80% of the original purchase consideration for the acquisition of CDS by TMX in 2012. Given that the acquisition cost of CDS did not include capital considerations for the replacement of the CDSX mainframe or other significant technology upgrades, we believe that the need to fund this modernization investment is a significant change. As the rebate elimination is a meaningful change that will impact adversely a number of participants, CDS has taken unprecedented steps to perform additional consultations with stakeholders in order to understand potential impacts and to obtain feedback from those most impacted by the proposed changes.

CDS began by meeting with regulators to advise of the significant change of circumstances being brought by the PTM project, and the need to review CDS's fee model to address the costs related to this technology modernization project. Following these regulatory meetings, CDS held consultations with some of its largest participants in summer, 2019, in order to gauge the impact of our proposal on the participants who collectively received approximately 70% of the rebates paid in 2018. It was important to have discussions with this subset of participants, as they are CDS's largest customers (on a transaction and fees paid basis) and, consequently, the largest beneficiaries of the rebates. Outright dismissal of our proposal by this subset would have required CDS to reconsider the proposal entirely. Of this group, CDS received responses ranging from understanding and support, to non-objections and non-committal responses. On the basis of these responses, CDS determined to proceed with further rebate elimination discussions and stakeholder presentations, and the decision was made to put forth the proposal to eliminate the network connectivity fees to partially offset the rebate elimination.

During the fall of 2019, CDS held two events to present the proposed rebate elimination and offset to participants. In September 2019, the changes were proposed at participant meetings held in Toronto and Vancouver. At these meetings, two participants - both smaller, independent dealers - expressed dissatisfaction with the proposed rebate elimination. Questions and comments raised by participants during these sessions were collated and are addressed in section VII of the Original Application.

All participants received a copy of the above-noted presentation materials, which are also available through the PTM project portal. Importantly, CDS provided each participant with its individual impact assessment on September 26, 2019, which shows 2018 CDS fees charged, rebates made for 2018 activity, and network connectivity fees charged in 2018. CDS continued to meet individually with participants during the fall of 2019, and maintained an open offer to meet with any participant that wanted to ask questions or provide comments in private. Importantly, we note that the elimination of the Report Fees was not included in this impact assessment, but the elimination of this fee would improve the financial outcome for all participants.

CDS has also presented this proposal to the Investment Industry Regulatory Organization of Canada ("**IIROC**") Finance and Operations Advisory Section and to the Investment Industry Association of Canada ("**IIAC**") Small and Independent Dealers Committee. Understanding the impact of the rebate elimination on smaller dealers is an important outcome from these consultations, and we believe that the removal of the network connectivity fees is a change that, for over 50% of small dealers, will cancel out the adverse impact that the rebate elimination otherwise would have.

b) Subsequent to Publishing the Original Application

CDS received nine comment letters responding to its Original Application, which were all generally negative. In April 2020, CDS met with the IIAC and its members to discuss the proposal and respond to a number of the comments and questions raised in the comment letters. In July 2020 CDS provided to CSA staff a draft written summary of comments and proposed responses to enable staff to continue their review of this file. In December 2020 TMX senior management met with the Chairs of the Ontario Securities Commission, the Autorité des marchés financiers, the British Columbia Securities Commission, and the Alberta Securities Commission to discuss the matter, including feedback received from participants, and to consider whether changes to the Original Application should be considered.

2. CDS's Response to Feedback

a) Prior to the Original Application

The fee proposal in the Original Application incorporated two main changes that had been made during the initial consultation process, to address certain concerns raised by participants. CDS's original concept in spring 2019 was an immediate and full elimination of the rebates, with no offset. During our early consultations, participants commented that CDS should make efforts to soften the impact of this change. In response to this feedback, CDS changed its original concept and developed the proposal that was presented to participants during the fall of 2019, which included (i) a phase-in of the rebate elimination, and (ii) a partial offset of the rebate elimination by eliminating network connectivity fees. Then, after the consultations that occurred during fall 2019, CDS determined that it could be beneficial to the industry to cut over from the existing network connection in advance of major PTM project changes that will take place in 2021. This enables the Network Fees to be eliminated sooner, once a participant has cutover from the CDS-operated network. Bringing forward the elimination of the Network Fees is a change from the proposal that was presented to participants during fall 2019, which has the effect of implementing some of the offset to the rebate elimination at an earlier date, which is beneficial to participants.

b) Subsequent to Publishing the Original Application

In response to comments received, CDS is publishing this Revised Application which includes two main changes to the Original Application. First, to provide an additional offset against the impact of the rebate elimination, the elimination of the Report Fees will result in aggregate savings to participants of approximately $1 million annually. Second, to ensure that the PTM initiative is completed prior to making fee changes that will impact the participants, the implementation of the rebate elimination will now be delayed until after the PTM launch.

C. Formal Fee Review and Approval Process

The proposal to eliminate the rebates has been discussed by the CDS Board of Directors during meetings in the spring, summer, and fall of 2019, as well as during meetings throughout 2020 and in January 2021. Since initiating consultations with participants, management has regularly reported to the Board on progress and feedback resulting from these consultations.

In finalizing this proposal, and in addition to the consultation described in section V(B) above, CDS has followed prescribed fee change process requirements, which include:

- the review and consideration by the CDS Fee Committee[6] at a Fee Committee meeting, held on October 8, 2019;
- the review by the Risk Management and Audit Committee of the Board (RMAC), and recommendation by RMAC to the Board to file the fee changes (as proposed in the Original Application), at a meeting held on October 31, 2019;
- the review by the Board and authorization by the Board to management to proceed with filing an application to CDS's primary regulators to eliminate the fee rebate and eliminate the network connectivity fees, at a meeting held on October 31, 2019;
- the review by the RMAC, and recommendation by RMAC to the Board to file the fee changes (as proposed in this Revised Application), at a meeting held on January 29, 2021;
- the review by the Board and authorization by the Board to management to proceed with filing an application to CDS's primary regulators to eliminate the fee rebate, eliminate the network connectivity fees, and eliminate the Report Fees, at a meeting held on January 29, 2021; and
- the notification to the CDS Fee Committee of CDS's intention to revise the Original Application.

VI. HISTORY OF CDS AND THE FEE REBATE

Note: Section VI in this Revised Application has not changed since it was first published in the Original Application.

A. CDS

CDS operates the depository and the clearing and settlement system for equities and fixed income securities in Canada, and is the sole provider of these services for the Canadian cash market. Prior to the transaction in 2012 which resulted in TMX owning CDS, CDS was owned jointly by six Schedule I banks, TMX Group Inc. and IIROC (representing the ownership interest of its investment dealer members), and was effectively operated on a cost recovery basis. An acquisition known as the "Maple Transaction" led to CDS's current ownership structure whereby

[6] The CDS Fee Committee is an advisory committee that consists of participants and other stakeholders, and CDS's regulators may attend as observers. The Co-Chairs (one of whom is CDS management, the other of whom is a participant employee) of the CDS Fee Committee provide a report of the meeting to the Risk Management and Audit Committee of the CDS Board.

TMX (owner of Toronto Stock Exchange and TSX Venture Exchange, among other financial services businesses), a widely-held public company, owns CDS. The Canadian regulatory authorities, when reviewing the CDS portion of the proposed Maple Transaction, considered certain key issues in determining whether the transaction was in the public interest, namely[7]:

- the implications of "vertical integration" of trading, clearing, settlement and depository infrastructure under common ownership;
- the "reorientation" of CDS from a cost-recovery industry utility to a for-profit commercial enterprise;
- the potential for TMX to act anti-competitively in the pricing of clearing, settlement and depository services; and
- the maintenance of fair access to clearing, settlement, and depository services by market participants not affiliated with TMX.

To address these key issues, the applicable regulatory authorities imposed extensive and stringent additional terms and conditions on CDS, including enhanced ongoing oversight of CDS. The 50/50 Rebate and the Additional Rebate were also proposed to the regulators during the Maple Transaction, and incorporated by the Ontario Securities Commission (**"OSC"**) and the Autorité des marchés financiers (**"AMF"**) into their CDS decision documents.

Some of the fee-related restrictions in CDS's recognition orders include:

- All fees imposed must be equitably allocated
- Fees cannot have the effect of creating unreasonable barriers to access
- The process of setting fees must be fair and appropriate
- The fee model must be transparent
- Discounts that are conditional upon the purchases of other services are not permitted
- Fees cannot provide discounts based on a participant's activity level
- The process for setting fees shall provide for meaningful input from the fee participant committee
- An independent auditor must provide an annual report on CDS's compliance with the fee and rebate model
- CDS must maintain an internal cost allocation model for the allocation of costs or transfer of prices between CDS and its affiliates, approved by the provincial regulators and audited annually by an independent auditor
- Fees charged for services shall not reflect the cost or expense incurred by CDS in connection with an activity of CDS's that is not related to that service
- CDS must provide to regulators a report on its fees, including benchmarking, every three years

[7] (2015), 38 OSCB 4456. *Multilateral CSA Staff Notice 24-313 CSA Staff's Review of Proposed Amendments to Fee Schedule of The Canadian Depository for Securities Limited (CDS Limited) and CDS Clearing and Depository Services Inc. (CDS Clearing) (collectively, CDS)*. May 14, 2015.

B. Rebates Introduced in the Maple Transaction[8]

During the comment period and public hearings related to the Maple Transaction, some participants expressed a concern that the Maple Transaction could affect CDS clearing fees, particularly for on-exchange clearing, and participants also expressed a concern that CDS, under Maple ownership, could set fees or access requirements in a manner that could discriminate against other marketplaces and smaller participants. To address these concerns, a large number of fee-related restrictions were imposed on CDS (listed in section VI(A) above), and the 50/50 Rebate and the Additional Rebate were established. This, despite the fact that fees for CDS clearing services at the time of the Maple Transaction in 2012, which remain in place today, had recently been set at a price level that was a 29% decrease from the 2011 published fees. Maple's intention was to craft a model of CDS fees in a for-profit regime that preserved certain elements of the industry utility model, in particular strong industry participation in CDS governance, but that also would bring the benefits of cost management and innovation that can come from a for-profit model. To additionally address participant pricing concerns at the time of the Maple Transaction, the 50/50 Rebate was proposed as was the Additional Rebate, which was intended to be reflective of synergies and efficiencies Maple expected to achieve as part of the Maple Transaction. The 50/50 Rebate was an offering that, while somewhat reflective of CDS practices prior to the Maple Transaction, is not sensible in a for-profit entity. Indicative of this is the fact that CDS is an outlier among its peers, where fee rebates are not used by other clearing houses that are operated in a for-profit model. The rebate model is unique to CDS. By contrast, it is not unusual for member-owned clearing houses to use rebate models, as was the case for CDS prior to the Maple Transaction. Rebates paid by CDS to participants prior to the Maple Transaction were reflective of positive retained earnings after capital and operating budgets were set for the following year. While rebates may be an effective way to operate for member-owned clearing providers, when used in a for-profit model as designed in the current CDS fee model, they do not provide for any flexibility to fund important technology projects or other capital-intensive investments.

Further, we note that volume projections made by CDS management at the time of the Maple Transaction were used to provide an estimate of rebate values as compared to the status quo. These projections were also used to calculate the expected return on investment to Maple (now TMX) for the CDS acquisition. The anticipated increases in volumes as projected by CDS management at the time of the Maple Transaction did not materialize, leading to actual results that are different from results that were estimated at the time of the Maple Transaction.

[8] See (2012), 35 OSC Bulletin (Supp-2) 103-105, May 3, 2012 for the relevant excerpt from Maple's letter regarding changes to the Maple Transaction regulatory application.

VII. SUMMARY OF COMMENTS ON THE ORIGINAL APPLICATION

In section VII of the Original Application[9], CDS documented a number of reactions and questions that it had received during its early consultations, as well as responses. CDS received nine letters commenting on the Original Application. The commenters were:

Canaccord Genuity Corp. (**"Canaccord"**)
Canadian Security Traders Association (**"CSTA"**)
Casgrain & Company Limited (**"Casgrain"**)
Fidelity Clearing Canada (**"FCC"**)
Haywood Securities Inc. (**"Haywood"**)
Investment Industry Association of Canada (**"IIAC"**)
Leede Jones Gable Inc. (**"LJG"**)
Questrade, Inc. (**"Questrade"**)
The Toronto-Dominion Bank (**"TD"**)

We have categorized the comments and questions, and we provide our responses below. For ease of reference, we provide a chart in Appendix "A" that maps the comments to specific commenters.

A. Questions on the Value of the PTM project

1. *Questions: Why do we need to proceed with the PTM project? How will PTM benefit clearing members? What are the deficiencies today?*

CDS Answer: The PTM project will result in a modernized system that provides clearing, settlement and depository functions for the Canadian cash clearing house. The current mainframe technology is at its end of life from a volume scalability standpoint and will require replacement in the coming years. While the current CDSX system is a safe and reliable system, the modernized system will continue to be reliable and meet participant needs, with three key enhanced areas that will ultimately provide value to participants: (i) flexible construct; (ii) robust security design; and (iii) better user experience.

(i) Flexible Construct used in Other Jurisdictions

The new system is java based, ISO compliant, enabled to distributed ledger technologies and compliant with global messaging standards. This change moves the CDS systems into a future-proofed environment whereby CDS will be in a better position to make changes that can benefit participants, more nimbly. The current mainframe technology is complex and is difficult to make changes to, which can delay CDS's ability to respond to participants' and regulators' requests for information. TCS's BaNCS product is proven

[9] The French version of the Original Application can be found on the AMF website in section 7.3.1 of the December 19, 2019 bulletin at:
https://lautorite.qc.ca/fileadmin/lautorite/bulletin/2019/vol16no50/vol16no50_7-3.pdf

technology with a global presence, having been implemented in 18 other jurisdictions around the world. This globally prevalent usage of the BaNCS technology will allow the Canadian market to benefit from the input from other entities that are like CDS, as it relates to system enhancements including compliance with common requirements derived from the Principles for Financial Market Infrastructures. Implementing the BaNCS technology allows CDS to move away from being a system developer, and will allow CDS and TMX to focus on being a system integrator, and bring continued efficiencies to Canadian participants. The BaNCS technology is also cloud and blockchain ready.

(ii) Robust Security Design

The new system is able to offer protective safeguards including two-factor authentication and enhanced network protection. The new system also comes with detective safeguards including malware detection on open systems and vulnerability scanning and management. This technology is consistent with CDS's goal to ensure the security of its systems. The flexible construct of the new system and its ability to natively support strong cryptography protocols means that implementing new security protocols can be added more effectively.

(iii) Improved User Experience

The new system will be accessed through a digital user interface that will be compatible on multiple devices and browsers, thereby providing flexibility to participants' staff. There will be enhanced client data access features which participants will be able to use to export data into excel/CSV format and perform analysis. Users will be able to use preferences optionality that will allow the user to configure data in different ways.

2. *Comment: CDS's proposal to eliminate the existing suite of reports currently provided to participants is not a positive change.*

CDS Response: The new system will allow for enhanced capabilities because participants will have access to their data, configurable in different presentation modes, and exportable into excel/CSV formats. Thus, with the new system, participants will be able to use their own analytics tools to review their data. Instead of receiving standardized reports from CDS, participants will be in a position to create their own reports based on data that is important to them.

CDS performed significant analysis before making any changes related to reporting and also sought feedback from participants who were users of certain reports, to verify our analysis. CDS reviewed every existing report for participant use and for CDS use, to understand the purpose of the report and to seek consolidation and elimination possibilities. In particular, during 2019 we conducted an exhaustive study to review report usage. During our review, we learned that over the past two decades there were a number of "one-off" reports that were developed. Given the complex nature of CDS's current systems, in the past it had been simpler to create a new report instead of amending an existing report. During our analysis, CDS observed that 72% of reports used by participants are represented by only 10 reports.

During the second half of 2020, CDS shared details of the new reporting solution with participants through a series of educational sessions, similar to how systems and operational changes were presented to the participants in the first half of 2020. CDS believes that with the new analytical tools that will come with the new system, participants will create smaller and more in-depth reports for themselves using the query capabilities of the new system.

3. *Comment: The industry needs enhancements only to the Entitlements and Corporate Actions functionality.*

CDS Response: CDS is aware that participants have been requesting changes to Entitlements and Corporate Actions (**"E&CA"**) functionality. Therefore, E&CA is the main area where users will see operational changes at the conclusion of the PTM project. The CDS relationship management team has worked diligently with stakeholders to ensure that the PTM project results in changes to E&CA operations that address existing stakeholder concerns. Although E&CA had been identified by users as being in need of functionality enhancements, this does not mean that CDS should limit its technological improvements to this area of its business. Per our answer above to Question A.1., a complete technology upgrade to CDS systems will have a positive impact in areas such as information security robustness and improved user experience.

B. Questions on the Costs of the PTM project

1. *Comment: Participants should not have to assume the full funding costs of the PTM project; this is a disproportionate shift of financial burden and risk of PTM to participants. CDS is off-loading the costs and risks of its capital projects on to its participants.*

CDS Response: CDS has proposed eliminating the rebates and we have also proposed eliminating network connectivity fees currently paid by participants. In response to comments received, CDS sought areas to further offset the impact of the rebate elimination, resulting in the new proposal to eliminate Report Fees. This new change will save participants approximately $1 million annually.

When all changes in this proposal are considered as a package, approximately one-third of participants will have an overall decrease in their CDS billings. Specifically, these participants that will see an overall decrease in their CDS billings are in the group of participants that is billed less than $1 million per participant in annual CDS core fees.

TMX as owner, and CDS as operator, of the systemically important cash clearing house in Canada, are responsible for ensuring the adequacy of the technology that supports the clearing house. Since being in the TMX organization since 2012, CDS has continued to operate at the highest level while TMX has continued to bring efficiencies to its operations by finding synergies through shared services and other TMX strategic realignments. These operational efficiencies have resulted in CDS participants continuing to reap the benefit of CDS activities while paying among the least expensive fees globally. We note that without TMX ownership and the resultant efficiencies and cost reductions, TMX financial projections show that the rebates would have been greatly reduced, and in some years not paid at all, and the cost of future modernization efforts would have had to be borne by participants in the form of increased fees or capital calls.

2. *Comment: The original project cost of $55-60 million was to be self-funded through CDS's annual savings in operating expenses of between $6-8 million. CDS has not adequately explained the significant cost increases over its initial budget.*

CDS Response: CDS acknowledges that the original budget for this project was too modest. CDS management made an error in its initial estimation process. The original project budget grossly underestimated the effort needed to develop business requirements and perform systems and user acceptance testing. The complexity associated with developing the business requirements in particular, which drives costs, was underestimated from the start.

It is the project timeline extension to Q4/21-Q1/22 that drives the overall increase in the project's cost. CDS acknowledges the two key changes that drive the timeline extension: (i) scope changes to account for certain functions, reporting and interfaces that should have been included in the original project scope; and (ii) industry testing and training that was not sufficiently captured in the original business case.

3. *Comment: What are the expected cost savings to CDS and how are these reflected in the rebate elimination proposal and in TMX's internal rate of return calculations? "It seems more likely that system changes are driven by cost savings for the combined TSX/CDS entity*".

CDS Response: The PTM project has been driven by the value that will result from implementing the updated system, which is outlined in our response to question A.1. above. Given the capital cost of the PTM project there will not be savings to CDS. CDS expects that the new system will result in synergies due to a reduction in technology/operations staff (including external consultants) and lower mainframe and storage operating costs; however, these synergies are forecast to be less than the ongoing licensing costs and depreciation of the new system's technology. Thus, our forecast is that the cost of the new technology is greater than any cost savings that may come from synergies.

4. *Comment: The CDS pricing structure already incorporates a budget for system maintenance and enhancements*.

CDS Response: Prior to the Maple transaction, CDS was a member-owned, not-for-profit corporation. As part of the annual budgeting process, funds were allocated by management annually for various projects. If these funds were not spent during the year, they would be taken into retained earnings. There was no year-over-year accumulation of these funds. While it was member-owned, one of CDS's participant committees, the Strategic Development Review Committee (**"SDRC"**) was involved in overseeing the allocation of CDS development resources as between various projects that were of interest to different SDRC sub-committees and other CDS participant committees. The purpose of this oversight was to try to ensure adequate development resources as across different CDS functions. Even prior to the Maple transaction, when the cost of a technology project was significant, the project would be funded in part by retaining revenue instead of providing the annual rebate to participants. This was the case at the time of the most recent significant technology development, that being the CDSX system, during the early 2000s.

Since mid-2012, CDS has been owned by TMX and operates as a for-profit corporation. As is the case with corporations that are not member-owned, CDS does not have a sinking fund for special projects. When CDS continued to offer its services under the existing fee model after the Maple transaction, this meant that the CDS Price Schedule and the rebate model as documented in the CDS recognition orders remained constant; it did not mean that the budgeting practices for CDS technology projects were "institutionalized in the Recognition Order", as was asserted in the comment letter from Haywood Securities Inc. CDS's sole source of revenue is the fees that it charges for the services it provides to its customers. Revenue earned is then applied to systems reinvestments. There is no separate fund or distinct pricing structure that enables CDS to fund technology improvements other than the revenue earned from the fees CDS charges.

5. *Comment: The Fees for Issuer Services were to be used to replace the Entitlements & Corporate Actions system. The rebate elimination appears to duplicate this fee increase.*

CDS Response: The proposed rebate elimination does not have the effect of duplicating the Issuer Services Fees. When taking into account the overall cost of the PTM project and the resulting ongoing depreciation costs, the Issuer Services Fees along with other revenues are not sufficient to reach CDS's target rate of return. While the Issuer Services Fees have had a positive impact on CDS's margins, most of the post-Maple margin improvements for CDS have come from operational efficiencies that have been brought to CDS through its acquisition by TMX. Since 2012, cost synergies coming out of the Maple transaction as well as further efficiencies from TMX's strategic realignment beginning in 2016 in aggregate have accounted for CDS's increased margin. The rebate elimination is required in addition to the revenue that accrues to CDS from the Issuer Services Fees, in order for CDS to reach its targeted internal rate of return.

6. *Question: How is this consistent with the Recognition Order and what governance framework is in place at CDS to evaluate the cost-benefit of future technology projects and what role would participants play in the process?*

CDS Answer: The PTM project and rebate elimination proposal follow governance practices used by TMX and its key subsidiaries. CDS, as operator of a systemically important system, and TMX, as owner of the clearing house, must retain the ability to determine the need to upgrade technology and to take action when it is appropriate to make upgrades. CDS and TMX perform the necessary analysis in this regard, which analysis is reviewed and approved by the CDS Board of Directors (and by the TMX Board of Directors if the cost is significant). The CDS Board must meet requirements set out in the CDS recognition orders including being composed of individuals, a majority of which are not employees of TMX or its affiliates. The CDS Board must also have a minimum number of participant representatives given the existing governance mechanisms in place at CDS and TMX, as well as independent Board members. The TMX Board is subject to additional requirements in particular because TMX is a public company. Due to TMX's public interest mandate and regulatory responsibilities, at least 50% of its directors must be independent. Given the existing governance mechanisms in place at CDS and TMX, a new governance framework will not be required to evaluate future technology projects. As is the case today, new or increased fees for core services cannot be charged by CDS other than through a public comment process and regulatory approval.

7. *Comment: Participants need more information to evaluate the change related to the connectivity costs. Using its own network provider may be more costly to a participant than using the CDS-managed network.*

CDS Response: In migrating from the CDS-managed network (for which service each participant currently pays Network Fees), each participant will be responsible for its own connectivity into CDS. The cost to a participant of migrating off of the CDS-managed network, and over to a network that it self-manages, will be the cost of the internal technology staff to assist with the migration, and then the ongoing cost (internal resources and external costs) of maintaining its line into CDS. As the communications gateway will be Internet Protocol in nature, CDS understands that participants will be able to use their existing connectivity services providers for this purpose. The new demarcation point to access CDS will be at a demarcation point that is already used by participants that access TMX exchange services, so for many participants, this connection already exists. Participants that do not yet have a connection to TMX will have the opportunity to use one of their existing service providers, or select a new telecommunications provider, based on the needs of their organization. All participants have been provided with relevant details related to this change, and we expect that participants will have moved off the current network by the end of Q2 2021.

In order to assist each participant in assessing the proposed rebate elimination, CDS provided each participant with data, based on 2018 numbers, of its Port Fees and its Network Fees as well as the value of the rebates received for 2018. The netting effect of removing the Port Fees and Network Fees while eliminating the rebate had a positive impact on approximately one-third of the participants, all of which were the lighter users of CDS services. CDS recently performed this analysis using more recent data, and the results have not changed: approximately one-third of CDS participants will benefit after netting out the rebate elimination with the removal of the Port Fees and Network Fees, and the elimination of the Report Fees. Generally speaking, the larger users of CDS core services will see their CDS fees more significantly impacted by the proposal to eliminate rebates than smaller users, because the positive benefit of netting of the network connectivity fees is less impactful for larger users.

Port Fees are represented by these billing codes:

7500 TCP/IP (Frame Relay) Port and Up to 16LUs
7501 TCP/IP Port and 17-256 LUs
7502 TCP/IP Port and 257-512 LUs
7503 TCP/IP Port and 513 LUs and Over
7535 Secured Sockets Layer (SSL)
7540 Site-to-site connection
7550 Network and Data Processing Move/Add

In the Original Application, we labelled billing codes 7535, 7540 and 7550 incorrectly. These three billing codes fall in the category of Port Fees. Network Fees are represented by billing codes 7530 to 7534, and billing codes 7536 to 7539.

8. *Comment: Participants are unable to evaluate this proposal because they don't know the overall costs related to the PTM project. Providing participants with further visibility on what additional resources they will need to devote to ingest the new technology would also be helpful.*

CDS Response: CDS held a series of meetings with participants throughout 2020 that detail the changes and impacts of the new system. To date the consensus from participants is that the changes are not disruptive. Through the completion of this project we will share information and provide the visibility required in order to manage as effective a transition as possible to the new system. We are also working with key industry utilities, ISM, Broadridge, and Paramax to help them understand the changes and impacts. We have shared information about technical changes to files and messages to enable service providers and IT staff at the participants to estimate systems change effort. We acknowledge that our participants are integral to ensuring a safe and measured transition to the new system. Throughout the summer and fall of 2020 CDS shared information on our testing strategy, as well as report and screen changes. As part of the PTM project, we intend to provide participants with a testing window of at least six months.

9. *Comment: For some, the impact of eliminating rebates will be material.*

CDS Response: We believe that it is misleading and inaccurate for any participant to state that the impact of the rebate elimination is material to it. For example, based on CDS's knowledge of the expenses paid by participants that are IIROC dealers, as an average the rebate elimination represents 0.04% of participant expenses. Of these participants that are IIROC dealers, only four measure their rebate elimination impact as more than 0.5%, with the most impacted of the four measuring its rebate elimination impact as being 1.08% of expenses. One of these four will see a decrease in its CDS fees when the netting of the connectivity fee elimination is factored in.

As previously stated, the overall clearing cost for approximately one-third of participants, including half of those participants that are billed $1 million or less per year, will decrease as a result of the proposed elimination of network connectivity fees and reporting fees. The CDS participants that are US and Canadian banks will be most heavily impacted by the proposed rebate elimination on a dollar basis, but as stated above, this impact will be de minimus when reflected as a portion of other similar fees or as a fraction of operating expenses.

In our view, it is reasonable to change a fee model where the result will be that CDS's fees remain among the lowest globally. In section X (B), we describe the results of a fee benchmarking report that was issued in 2019 by a third-party. The report used CDS's posted fees as its inputs (i.e. fees before any rebates paid) and found that CDS is an extremely low-priced provider of clearing and settlement services. CDS's low clearing and settlement fees relative to our global comparators are demonstrable evidence of the efficient and high-value service that CDS provides.

C. Comments on Implementation of the Rebate Elimination

1. *Comment: If implemented, rebates should be removed only once PTM has been completed.*

CDS Response: CDS understands the rationale behind this comment. CDS accepts this participant feedback and we agree to not eliminate the fee rebate, the Port Fees and the Report Fees until after the PTM project is launched. CDS ceases charging the Network Fees as soon as a participant transfers its network connectivity management away from CDS.

2. *Comment: Rebates could be suspended rather than eliminated.*

CDS Response: CDS has determined that an important change in its funding model is necessary to implement not only the PTM project but also all future systems developments, to maintain the safety of this critical capital markets infrastructure. Therefore, a meaningful change to the fee model is needed. The modernized system is expected to have a 10 to 15 year useful life. In a for-profit structure, it is not efficient to give rebate holidays from time to time in order to fund infrastructure projects; it is more efficient to price services in a manner that enables the entity to use revenue to both operate the business and make capital investments as needed. Eliminating the rebates will allow for both stable and effective provision of our services and for ongoing capital investment.

D. Other Comments

1. *Comment: The impact of these changes is less significant for Maple shareholders.*

CDS Response: This comment is false and misguided. As stated in the Original Application, TMX is a widely-held public company. At the time of the Maple transaction, certain TMX shareholders were parties to nomination agreements that ensured representation on the TMX Board of Directors for these shareholders. These nomination agreements expired in the fall of 2018. Of the original Maple shareholders that are also CDS Participants, to our knowledge only one continues to be a shareholder of TMX and it holds less than 10% of the outstanding TMX shares.

2. *Comment: Technology costs were foreseeable at the time of the Maple transaction. Participants should not pay for bad due diligence.*

CDS Response: Given the stability of the system, a significant technology project of this nature was not contemplated at the time of the Maple transaction in 2012. After many years of operating CDS, TMX and the CDS management and Board of Directors have had the ability to assess the CDS technology platform and determine the best way to move forward.

3. *Comment: These changes are inconsistent with the recognition orders that were established, in part, to help achieve a proper balance among the interests of the owners of CDS and the participants.*

CDS Response: The rebate elimination proposal is entirely consistent with the CDS recognition orders. First, the process is following the fee change protocol which requires regulatory approval from certain provincial securities regulators after a public comment process. Second, we acknowledge that a proper balance between owners and users of CDS is essential. In our view, the appropriate balance will be maintained when the rebate is eliminated. The cost synergies targeted and realized by TMX following its acquisition of CDS were not, on their own, enough for TMX to realize its target IRR following the Maple Transaction; it was also depending on increased volumes at CDS. Therefore, despite those cost synergies being realized by TMX, the failure of the volume assumptions to materialize has left TMX with a return on investment in CDS below its target IRR, all the while keeping CDS prices at 2012 level that are among the lowest in the world. It is appropriate for TMX to obtain its expected IRR on its investment in CDS so long as CDS continues to provide this service to its participants at expected levels. The impact of the rebate elimination on participants is de minimus. By contrast, if CDS were to employ an entirely new system that is future-proofed with an expected life of 10 to 15 years, with a negative impact to TMX's IRR, this would not be a balanced result.

VIII. ALTERNATIVES CONSIDERED

Note: Section VIII in this Revised Application has not changed since it was first published in the Original Application.

A. Increase Fees for Core Services

In a for-profit model, increased revenue is needed to fund capital investment without reducing the rate of return. CDS's choice was to fund the PTM project either through increased fees or through reduced rebates. We believe that increasing fees would have been a significantly more complex path to achieving the same outcome as eliminating rebates; CDS and our stakeholders would have been required to review a large number of individual service price increases in the CDS fee schedule, calculate applicable increases, and consult on these multiple prices. In addition to the time and resource costs imposed on our stakeholders in the course of such a review, the broadly diverse nature of CDS's participant base, and the significant size differences between participants would have, in all likelihood, resulted in a more extensive, and possibly less equitable, adverse impact on participants if fees were to be increased. By contrast, the rebates are comprised of two components that are simple to calculate, and for which "pro forma" style examples can be (and have been) put to the participants (based on 2018 results). The proposal to eliminate the rebate is easy to understand, and results in a fee model under which the posted fee is the full price of the service, rather than its current state, which is a list of services posted at a "pre-rebate" price. Overall, CDS determined that the elimination of the rebates, as opposed to specific and broad-based fee increases, was the most efficient and equitable approach.

B. Permanent Rebate Elimination vs Temporary Rebate Holiday

CDS is proposing the rebate elimination not only to fund the PTM project, but to fund future technology projects on an ongoing basis. The modernized system to be launched at the end of 2021/early 2022 is expected to have a 10 to 15 year useful life. In a for-profit model, it is not efficient to give rebate holidays from time to time in order to fund infrastructure projects; it is more efficient to price services in a manner that enables the entity to use revenue to both operate the business and make capital investments as needed from time to time. We believe that eliminating the rebates is an appropriate change that we expect will allow for both stable and effective provision of our services and for ongoing capital investment while simultaneously meeting TMX's minimum expected IRR for the CDS business.

IX. GLOBAL COMPARISON TO OTHER CLEARING AGENCIES

Note: Section IX in this Revised Application has not changed since it was first published in the Original Application.

A. Rebates are a Unique Model

CDS has engaged an external consultant on four occasions since 2011 to perform a global benchmarking fee review for clearing house services. As mentioned in section III(A)(3), the most recent fee benchmarking was completed in 2019 and the external consultant's report was submitted to regulators and an executive summary of the report has been posted for CDS participants on the PTM project portal.[10] In the course of the benchmarking exercise, the external consultant was unable to find any clearing houses with similar ownership structures to CDS that provided rebates to its clients. While the concept of participant rebates and drawdowns may be used by clearing houses that are member-owned (for example, DTCC), the concept of participant rebates is atypical in a for-profit clearing house model. By contrast, there are a number of clearing houses that provide discounts to their fees based on participant activity (eg. discounts for high volumes). Discounts are not the same as a rebate concept. Since the Maple Transaction, CDS has been prohibited under its recognition orders from providing discounts based on a participant's activity level.

B. Global Fee Benchmarking, 2019

The external consultant's 2019 report, which utilized CDS's posted fees (i.e. fees before any rebates paid), found that CDS is an extremely low-priced provider of clearing and settlement services, with prices that rival those of DTCC. DTCC is widely considered to be the lowest cost provider of these services in the world. CDS was found to be the lowest cost provider (clearing and settlement fees) for OTC transactions (equity and fixed income) and for on-exchange fixed income transactions. CDS is the second lowest cost provider of on-exchange equity security transactions (clearing and settlement fees), second only to DTCC. For custody-related fees, CDS was found to be the fourth-lowest for fixed income securities. For custody of equities, benchmarking is difficult as the approach to equity custody pricing used by CDS and DTCC is unique as compared to global peers, as the charges in the US and Canada are based on volume (positions and share totals) rather than value. A straight comparison for equity custody as against DTCC is also difficult to perform as DTCC's customers benefit from tiered volume discounts, which CDS does not offer (and is not permitted to offer pursuant to its recognition orders).

[10] The executive summary of this report is also publicly available at: https://www.cds.ca/resource/en/196.

We believe that CDS's low clearing and settlement fees relative to our global comparators are demonstrable evidence of the efficient and high-value service that CDS already provides to its participants. As stated above, in performing the analysis that led to these rankings, the external consultant used CDS's posted fees, and did not take into account the rebates that would have had the effect of CDS's fees being even lower. Put another way, this benchmarking has been performed as though the rebates did not exist; the impact of eliminating the rebates will not change the fact that CDS is an extremely low cost provider of clearing and settlement services globally.

X. PUBLIC INTEREST

CDS submits that the proposed changes described in this notice are not contrary to the public interest.

XI. COMMENTS

Comments on the proposed changes should be in writing and submitted by **March 29, 2021** to:

Wayne S. M. Ralph
Chief Operating Officer
CDS Clearing and Depository Services Inc.
100 Adelaide Street West
Toronto, Ontario
Email: wayne.ralph@tmx.com

Copies should also be provided to the Autorité des marchés financiers, the British Columbia Securities Commission and the Ontario Securities Commission by forwarding a copy to each of the following individuals:

Me Philippe Lebel
Secrétaire général, et directeur général des affaires juridiques
Autorité des marchés financiers
Place de la Cité, tour Cominar
2640, boulevard Laurier, bureau 400
Québec, Québec G1V 5C1

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Manager, Market Regulation
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Comments received during the comment period will be made available to the public.

APPENDIX “A”
Comments Received on Original Application (See Section VII.)

Number	Comment/Topic	Commenter
A	**Value of the PTM project**	
A.1.	Why do we need to proceed with the PTM project? How will PTM benefit clearing members? What are the deficiencies today?	Canaccord FCC Haywood IIAC LJG
A.2.	CDS’s proposal to eliminate the existing suite of reports currently provided to participants is not a positive change.	Casgrain
A.3.	The industry needs enhancements only to the Entitlements and Corporate Actions functionality.	Canaccord Haywood
B	**Costs of the PTM project**	
B.1.	Participants should not have to assume the full funding costs of the PTM project; this is a disproportionate shift of financial burden and risk of PTM to participants. CDS is off-loading the costs and risks of its capital projects on to its participants.	Casgrain CSTA FCC Haywood IIAC LJG Questrade TD
B.2.	The original project cost of $55-60 million was to be self-funded through CDS’s annual savings in operating expenses of between $6-8 million. CDS has not adequately explained the significant cost increases over its initial budget.	Haywood IIAC LJG Questrade
B.3.	What are the expected cost savings to CDS and how are these reflected in the rebate elimination proposal and in TMX’s internal rate of return calculations? “It seems more likely that system changes are driven by cost savings for the combined TSX/CDS entity”.	Casgrain CSTA Haywood IIAC LJG

B.4.	The CDS pricing structure already incorporates a budget for system maintenance and enhancements.	Canaccord Haywood IIAC LJG Questrade
B.5.	The Fees for Issuer Services were to be used to replace the Entitlements & Corporate Actions system. The rebate elimination appears to duplicate this fee increase.	IIAC
B.6.	How is this consistent with the Recognition Order and what governance framework is in place at CDS to evaluate the cost-benefit of future technology projects and what role would participants play in the process.	IIAC
B.7.	Participants need more information to evaluate the change related to the connectivity costs. Using its own network provider may be more costly to a participant than using the CDS-managed network.	Casgrain CSTA FCC IIAC LJG Questrade TD
B.8.	Participants are unable to evaluate this proposal because they don't know the overall costs related to the PTM project. Providing participants with further visibility on what additional resources they will need to devote to ingest the new technology would also be helpful.	FCC IIAC
B.9.	For some, the impact of eliminating rebates will be material.	FCC IIAC
C	**Implementation of the Rebate Elimination**	
C.1.	If implemented, rebates should be removed only once PTM has been completed.	Casgrain IIAC LJG
C.2.	Rebates could be suspended rather than eliminated.	Canaccord Casgrain LJG
4	**Other**	
4a	The impact of these changes is less significant for Maple shareholders.	FCC

4b	Technology costs were foreseeable at the time of the Maple transaction. Participants should not pay for bad due diligence.	CSTA FCC Haywood
4c	These changes are inconsistent with the recognition orders that were established, in part, to help achieve a proper balance among the interests of the owners of CDS and the participants.	CSTA FCC