

Public Procurement Notice

**Integrated, world-class
public transit project:
*Réseau express métropolitain
de l'Est de Montréal***

Montréal
October 19, 2021

Translation Notice:

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1. INTRODUCTION

1.1 PURPOSE AND CONTENT OF THE PUBLIC PROCUREMENT NOTICE

CDPQ Infra Inc. (“CDPQ Infra”) has begun planning a world-class integrated, automated and electric light rail project: the *Réseau express métropolitain de l’Est*, hereinafter referred to as “the Project” or “REM de l’Est.”

REM de l’Est will consist of a light rail system with 32 km of track and 23 new stations, providing fast and comfortable transit options linking city residents with the neighbourhoods of Montréal-Est.

This Public Procurement Notice is addressed to any party interested in executing the Project. The information it contains is for informational purposes only, given the Project’s current detailed planning status. It is only intended to provide interested parties with a general idea of the Project. The Project will continue to evolve as it incorporates changes and improvements as they develop.

You will find:

- Section 1 provides a brief description of the *Caisse de dépôt et de placement du Québec* (“CDPQ”) and CDPQ Infra, its wholly owned subsidiary that will be responsible for Project execution.
- Section 2 provides an overview of Project highlights, the proposed route and its components.
- Section 3 outlines the Project’s primary deadlines.
- Section 4 provides information pertaining to the Project’s procurement process.

Additional Project information is available on the CDPQ Infra website at the following link:

- <https://cdpqinfra.com/en/rem-est>

An information session will be held via webcast on the date indicated below, to answer questions from parties interested in the execution of the Project. Questions can be submitted in advance by email to “appro-projets@cdpqinfra.com” with “03-CDPQI-AAM Questions” in the subject line. All questions will be answered during the information session that will be held on:

November 19 from 10:00 am to 12:00 pm.

Anyone wishing to attend this information session are asked to confirm their participation by **November 8, 2021** by emailing “appro-projets@cdpqinfra.com” and providing their name, title, and company name.

1.2 CAISSE DE DÉPÔT ET PLACEMENT DU QUÉBEC

Created in 1965, CDPQ is one of the largest institutional fund managers in Canada and North America. It is Canada’s leading private equity investor and one of the top ten real estate asset management companies in the world.

CDPQ serves 42 groups of depositors, which are mainly public and parapublic pension and insurance funds. As of December 31, 2020, its depositors had \$365.5 billion in net assets (including \$28 billion in the infrastructure portfolio). The infrastructure portfolio includes substantial investments in the transportation sector, such as:

- Eurostar (30% ownership interest) – Eurostar is Europe’s leading high-speed train operator and the only provider of service between London and mainland Europe, carrying more than 11 million passengers each year through the Channel Tunnel.

- InTransit BC (33.3% ownership interest) – InTransit BC is a 35-year light rail concession for a 19.5-km public transit line connecting downtown Vancouver to the City of Richmond and the Vancouver International Airport.
- Sydney Metro (24.9% ownership interest) – CDPQ acquired an interest in the public-private partnership contract for the trains, systems, operations and maintenance of Sydney Metro, Australia’s largest public transport project and first driverless metro system in Australia. It includes the North West and City & Southwest lines.

CDPQ’s financial position has earned it the highest credit ratings from the following rating agencies: Moody’s Investors Service (“AAA”), Standard and Poor’s (“AAA”), DBRS (“AAA”) and Fitch (“AAA”).

1.3 CDPQ INFRA INC.

CDPQ Infra, a wholly owned subsidiary of CDPQ, is a private corporation constituted in 2015 under the *Business Corporations Act (Québec)*. Its head office is at 1000 Jean-Paul-Riopelle Place, Montréal, Québec, Canada.

Its main activities involve the planning, financing, implementation and operation of major infrastructure projects.

A commercial agreement was signed between the Government of Québec and CDPQ to define the general framework and guiding principles enabling CDPQ Infra to carry out public infrastructure projects in Québec. CDPQ Infra can also invest in projects elsewhere in Canada and abroad, which are not subject to this agreement.

To date, CDPQ Infra’s portfolio consists of several infrastructure projects:

- In the execution phase:
 - The *Réseau express métropolitain* (the “REM”) is a new, 67-kilometre automated light rail system that will link downtown Montréal, the South Shore, the West Island, the North Shore and the airport.
- In the detailed planning phase:
 - The *REM de l’Est*, announced December 15, 2020, consists of a 32-km automated light rail system that will serve 23 new stations, providing fast and comfortable transit options linking city residents with the neighbourhoods of Montréal-Est.
- In the preliminary study phase:
 - CDPQ Infra has been mandated by the Government of Québec to conduct preliminary studies for other public transit infrastructure projects in Quebec, which are currently in progress.

2. PRESENTATION OF THE PROJECT

2.1 OVERVIEW

The *REM de l'Est* is a comprehensive infrastructure that will provide automated light rail service in the east and northeast areas of Montréal. The proposal currently features two branches that will merge into a common segment towards downtown Montreal. About 32 km in length and featuring 23 stations, it would cover a vast area from downtown Montréal to the eastern tip of the island, as well as the northern portion of the island up to Maurice Duplessis Boulevard near Cégep Marie-Victorin. The current route provides for approximately 24 km of overhead structure and more than 8 km underground.

At this stage of the studies, there is no plan to connect the two systems to provide interoperability between the REM and the *REM de l'Est*.

Table 1 lists the Project characteristics as they are currently proposed.

Table 1: Project characteristics

	<i>REM de l'Est</i>
Dimensioning	<ul style="list-style-type: none"> ○ 32 km of double tracks serving the east, northeast and downtown areas of Montreal ○ 23 universally accessible, enclosed, climate-controlled stations ○ Optimized feeder service for public transit, active transportation and private vehicles ○ 3 park-and-ride lots ○ 8 km of tunnels on the northern segment ○ Approximately 700 m of tunnel downtown ○ 24 km of overhead structure ○ An operations and maintenance centre ("OMC"), including a central control station ("CCS") and back-up CCS
Rolling Stock	<ul style="list-style-type: none"> ○ Fleet of about 80 cars ○ 2-car indivisible train sets
Technology choices	<ul style="list-style-type: none"> ○ Electric light rail cars ○ Automated driverless system (GoA4) ○ Platforms approximately 40 m long ○ Platform sliding doors ○ Electrical power supply via catenary (1500 Vdc) ○ Elevators and escalators at stations ○ Wi-Fi throughout the network ○ 5G in tunnel(s)
Operation and Maintenance	<ul style="list-style-type: none"> ○ Integral automatic driving ○ Attendants circulating in the trains and stations for information and inspection purposes ○ Integration of networks and feeder bus service provided by other operators at stations ○ Tickets sold in the stations at automatic vending machines ○ Daily inspection, regular maintenance of rail infrastructure, civil engineering structures and buildings (e.g. track foundations and right-of-way, stations, OMC, substations and power lines, park-and-ride facilities, bridges and tunnels) ○ Maintenance of the rolling stock, automated train control system, control centre, platform sliding doors and all low- and high-voltage systems

2.2 PLANNED PROJECT ROUTE

Figure 1 shows the proposed route for the Project.

Common Segment

The common segment begins underground in downtown Montréal and transitioning overhead down the centre of René-Lévesque Boulevard, from the Saint-Urbain Station up to Notre-Dame Street. East of downtown, the route continues on Notre Dame Street and serves several areas undergoing revitalization efforts in the Sainte-Marie, Hochelaga-Maisonneuve and Viauville neighbourhoods before branching off northward near Dickson Street and splitting into two separate branches. The Project also includes a station at Pie-IX Boulevard, providing a connection to the future Bus Rapid Transit (BRT) on Pie-IX Boulevard. This common segment features 7 km of track, one underground station and seven overhead stations.

Marie Victorin Branch

This 11-km, eight-station branch provides service to the Cégep Marie-Victorin sector. The route begins with an overhead structure at the end of the common segment before transitioning to underground near L'Assomption Boulevard. An overhead station is planned near the Assomption Station of Montréal metro's green line. The route then continues northward, providing service to the Maisonneuve-Rosemont Hospital and veers near Lacordaire Boulevard and Jean-Talon Street, where the future Lacordaire Station on the blue line extension will be built, providing access to intermodal connections. The underground route then crosses Highway 40 and continues to Saint-Leonard, still underground, following Lacordaire Boulevard. The route then runs beneath the CN Saint-Laurent subdivision railway line, on its way to Henri-Bourassa Boulevard in Montréal-Nord and takes a final turn toward Maurice Duplessis Boulevard near Cégep Marie-Victorin. The underground segment features seven stations and about 8 km of tunnel.

Pointe-aux-Trembles Branch

The Pointe-aux-Trembles branch provides services to the east end of Montréal with 14 km of track and seven overhead stations. It begins east of the common segment near Dickson Street, runs along Souigny Avenue before crossing Highway 25 to Sherbrooke Street East, allowing a connection with the Honoré-Beaugrand terminal station of Montréal metro's green line. The route is overhead over Sherbrooke Street in the Mercier East sector, then continues through Montréal-Est to Pointe-aux-Trembles. The terminal station for this branch is located near the Pointe-aux-Trembles train station, offering a connection to the Mascouche commuter rail line. The Pointe-Aux-Trembles branch offers several bus and car feeder options from Highway 25 and Highway 40.

Figure 1: Planned project route



The stations will be equipped with elevators and escalators. They will be designed to allow installation of ticket validation gates at access points.

Entrance will be closed and climate-controlled. Platforms will be protected from the tracks by sliding doors that will only open when a train is present.

Passenger safety will be ensured by constant video surveillance of platforms, stations, and inside rail cars. Customers will also be able to contact a CCS from rail cars or platforms for emergencies or just to obtain customer information. They will also be able to contact customer service using a mobile app or by phone call.

A specific OMC is planned for train storage, maintenance and operation of the *REM de l'Est*.

The OMC also includes the CCS, the back-up CCS and storage areas for *REM de l'Est* industrial maintenance vehicles, a train washing machine and an automated train inspection system.

Several intermodal connections are planned along the route:

- to Montréal's metro stations (green and future blue lines);
- to the commuter train (Mascouche);
- to the Pie-IX BRT;
- to the bus networks (Société de Transport de Montréal, Société de Transport de Laval, Réseau de Transport de Longueuil, Exo/Réseau de transport métropolitain);
- to the REM (Central Station); and
- to inter-city trains (Central Station).

2.3 ALLOCATION OF RESPONSIBILITIES

The Project's procurement processes (the "RFPs") will result in signature of major contracts, which could include:

- A contract for the supply of rolling stock and systems (RSS Contract)
- A design-build contract for the tunnel (Tunnel EPC Contract)
- A design-build contract for the civil engineering and overhead work (CEO EPC Contract).
- A two-phase contract for shadow operator services and for operation and maintenance services for the Project's infrastructures and assets (SOOM Contract).

For optimization purposes, one or more additional RFPs could also be issued for construction packages for certain Project's peripheral developments.

A focus group was launched to study the best management solutions for integration issues between different contracts and/or with third parties. An integration plan will be included in the RFP for each contract to identify critical interfaces beforehand, and to determine which entities are best positioned and most experienced to manage these interfaces.

The contractual approach is currently being defined. Several variants are being studied. The type of contract will be specified when each RFP is launched.

Table 2 presents the preliminary proposed assignment of design, construction, operation, routine maintenance, as well as maintenance responsibilities distributed across the Tunnel EPC Contract, the CEO EPC Contract, the SOOM Contract, and the RSS Contract.

Table 2 – Proposed assignment of responsibilities

	RSS	Tunnel	CEO	OM	Others
North-South Tunnel					
Approximately 8km of bored tunnel, including launch shafts and spandrel walls at stations		X			
50m cut-and-cover tunnel, including tunnel portal		X			
Open trench of about 100m and backfill for the transition to the overhead structure		X			
MEP tunnel (ventilation, drainage, fire protection, lighting)			X		
Civil works, structures and buildings					
Overpasses			X		
Downtown tunnel of approximately 700 m			X		
Underground stations: excavation, concreting, sealing of the outer shell of underground stations			X		
Underground stations: interior structures, architectural finishes, MEP			X		
Overhead stations			X		
Design-build of the operations and maintenance centre (OMC)			X		
Parking lots and exterior lighting			X		
Traffic, signage and lighting			X		
Landscaping			X		
Modifications to existing infrastructure and preliminary works					
Relocation of utilities			X		
Preliminary works					X
Superstructures					
Railroads and railroad equipment			X		
Catenary systems and equipment			X		
Acoustic barriers, safety measures and equipment, lighting and others			X		
Auxiliary power			X		
Traction power			X		
Rolling stock and systems					
Rolling Stock	X				
Automated driving system (CBTC)	X				
Central control station (CCS)	X				
Platform sliding doors			X		
Telecommunication – Com - Scada	X				
Information system and video surveillance & signage	X				
Intrusion detection and access control system	X				
Ticketing (installation and tests only)	X				
Operation and maintenance					
Advisor in the planning phase				X	
Advisor in the execution phase				X	
Operation and maintenance				X	
Long-term asset maintenance					X

Note, MEP - mechanical, electrical and plumbing

Table 2 – Proposed assignment of responsibilities

Note, MEP - mechanical, electrical and plumbing

2.4 KEY FACTORS CONSIDERED IN THE RFPS

As an indication, critical success factors for contracts may be considered during the evaluation processes:

For the Tunnel EPC Contract and CEO EPC Contracts (“Construction Contracts”):

- Financial capacity
- Approach to and experience in integrated management of large-scale projects
- Organization, experience, capacity and depth of the proposed team
- Management approach to issues, risks and related mitigation measures
- Ability to plan, organize and optimize work, according to a specific and defined allotment across various work packages
- Experience in managing stakeholders during the design and work execution phases, particularly in urban areas
- Experience in executing fully automated rail transit projects in a region with varying and winter weather conditions, similar to those in the Montréal region
- Experience and ability to build ground, overhead, bridge and underground rail structures
- Experience in obtaining environmental permits and authorizations required to work in various types of environments (including highly urbanized areas, highway environments, heritage and historical areas, crossing bodies of water, contaminated soils, etc.)

For the RSS Contract:

- Financial capacity
- Experience in designing automated and electric light rail cars
- Experience in integrating material and equipment for production of automated and electric light rail cars
- Experience in testing and implementing a light rail service, including obtaining safety certification, commissioning and operation of a public transit system
- Health, safety and environment
- Project management

For the SOOM Contract:

- Financial capacity
- Experience in operating an electric and automated light rail system, including: maintenance workshop, operating system, control centre, signalling, connection and disconnection of subway trains or trains, etc.
- Experience in routine and long-term maintenance in winter conditions similar to those in the Montréal region
- Experience in testing and implementing a light rail service, including obtaining safety certification, commissioning and operating a public transit system
- Health, safety and environment

3. PROJECT DEADLINES

Table 3 lists the primary deadlines targeted for the Project¹.

Table 3: Primary deadlines

	Deadlines
Public Procurement Notice	October 19, 2021
Information Session	November 19, 2021
Procurement Process for the SOOM Contract	Fall 2021
Procurement Process for the Construction Contracts	Winter 2022
<i>Bureau d'audiences publiques en environnement</i> ("BAPE") public hearings	Spring 2022
Procurement Process for the RSS Contract	Spring 2022
Submission of proposals for the SOOM Contract	Spring 2022
Submission of proposals for the RSS Contract	Fall 2022
Submission of proposals for the Tunnel EPC Contract	Fall 2022
Submission of proposals for the CEO EPC Contract	Summer 2023
Start of Construction Contract execution	Spring/Summer 2023
Complete Commissioning	2029

¹ Deadlines and/or activities may be withdrawn or postponed

4. PROCUREMENT PROCESSES

The governance and requirements of the procurement processes will comply with best industry practices and with CDPQ Infra's procurement policies to guarantee fair, transparent and impartial dealings with all interested parties.

Several process auditors have been mandated to monitor the procurement processes and the selection of preferred proponents. Resources will also be allocated to reviewing business relationships and conflicts of interest during the procurement processes and Project execution. Evaluation committees will be established to assess specific sections of the proposals. These committees will be independent of each other and will be composed of internal and external assessors. The recommendations of the various evaluation committees will be submitted to an internal review panel that will be responsible for quality control, compliance with rules and final recommendations.

4.1 AUTHORIZATION FROM THE AUTORITÉ DES MARCHÉS PUBLICS

Parties interested in participating in a RFP, as well as their partners and subcontractors, will be required, as further specified in the RFPs, to obtain an authorization to contract from the *Autorité des marchés publics* (AMP). As obtaining this authorization can cause delays, it is strongly suggested that interested parties and their partners and subcontractors initiate these steps as soon as possible.

When they submit their proposals, interested parties, their partners and subcontractors will be required to provide this certificate or, if not yet obtained, proof of filing the demand or its renewal.

The AMP publishes a guide for Québec-based and foreign enterprises² to help them prepare their application for authorization. This guide can be accessed using these links:

- In French:
 - (Québec-based enterprises) <https://www.amp.quebec/autorisation-de-contracter/guides-et-declarations/>
 - (foreign enterprises) <https://www.amp.quebec/autorisation-de-contracter/entreprise-etrangeres-et-personnes-physiques-exploitant-une-entreprise/>
- In English:
 - (Québec-based enterprises) <https://amp.quebec/en/authorization-to-contract/guides-and-declarations/>
 - (foreign enterprises) <https://amp.quebec/en/authorization-to-contract/foreign-enterprises-and-natural-persons-operating-an-enterprise/>

Other information relating to preparing an application for AMP authorization includes:

Type of applicants	Source of information	Website
Québec-based companies	Request for authorization to be submitted through AMP's E-Services	https://amp.quebec/en/authorization-to-contract/e-services/ (bilingual site)
Foreign companies or companies based in another Canadian province	Request for authorization to be completed by hand	https://amp.quebec/en/authorization-to-contract/foreign-enterprises-and-natural-persons-operating-an-enterprise/ (bilingual site)

² "Foreign or foreign-based enterprises" include enterprises that are not constituted under the laws of Québec and do not have their head office or an establishment in Québec where they primarily conduct their activities.

4.2 REGISTER OF ENTERPRISES INELIGIBLE FOR PUBLIC CONTRACTS

The *Registre des entreprises non admissibles aux contrats publics* (“RENA”) is a record of the names of enterprises that have committed an offence stipulated under Schedule 1 of the *Act respecting contracting by public bodies* (CQLR, c. C-65.1) (the “CPBA”). Furthermore, under the CPBA, the RENA lists enterprises that have been refused authorization to enter into public contracts or public subcontracts, or have had their authorization revoked by the AMP. Therefore, from the time that it is listed on the RENA, an enterprise cannot be awarded a public contract or public subcontract or continue with the execution of such a contract.

Parties interested in submitting a proposal in response to the Project RFPs, as well as their partners and subcontractors, shall not be registered on the RENA. Since this information is public, CDPQ Infra will verify at various stages of the process that interested parties are not listed on the RENA.