ANNEX A

The Public Health Agency of Canada (PHAC) has established agreements with Astra Zeneca, Sanofi and GlaxoSmithKline, Novovax, Johnson & Johnson, Pfizer, Medicago and Moderna to ensure up to 358 million doses of their COVID-19 vaccine candidates. These vaccines have a range of stability data, including ultra cold at -80^{o}C, frozen at -20^{oC} and cold at 2^{o}C to 8^{o}C, with various shelf life.

PHAC has a requirement for one or more Logistics Service Providers (LSP) to deliver a broad range of end-to-end logistics and support services, on an as and when required basis, for the execution of its vaccine logistics strategy. The bulk of this work will include the range of services and activities related to the safe management and timely distribution of COVID-19 vaccines across Canada, including to remote and isolated communities, and to Canadians serving abroad. Business partnerships and collaborations are encouraged to fulfil this requirement. The management and distribution of vaccine ancillary (administration) supplies is not included in this work.

Given the urgency, in future phases of the procurement process, suppliers will need to clearly demonstrate their capability and capacity to commence work by December 15, 2020. Accordingly, Canada expects to evaluate suppliers on, among other criteria, their broad scope of experience, and requisite services, resources, networks, capabilities, equipment, licenses, certifications and accreditations, as relate to:

- Their national representation to execute the full scope of work in serving Canadians in all federal, provincial and territorial jurisdictions, including their ability to scale up quickly to serve remote and isolated communities;

- A broad network of safe, secure, regulatory compliant and DEL-licensed warehouses and distribution centres for the management and control of vaccine inventories in the ultra-cold, frozen and cold chains, and for the management and disposal of hazardous medical waste, in accordance with manufacturer specifications;

- A safe, secure and risk-managed national, regional and last-mile transportation network for the temperature-controlled distribution of vaccines by air and road, including to remote and isolated communities;

- An established web-based real time monitoring capability, including the infrastructure, equipment and IT platforms for the data-logging and track & trace of vaccines within warehouses and distribution centres, and along the distribution chain. Vaccine Information and data sharing between the LSP, PHAC and jurisdictional stakeholders will be essential;

- A Business Continuity Plan, as well as the ability, capacity and resilience to manage crises and emergencies in a practical and effective manner;

- The ability to scale capacities, responsiveness and resources to address surges in activities, bottlenecks and unforeseen requirements; and

- Cost effectiveness

Several of Canada's procured COVID-19 vaccines have unique and complex technical specifications that demand time-sensitive transportation, storage, management, handling and distribution in the ultra cold (-80^{o}C), frozen (-20^{o}C) and cold (2^{o}C to 8^{o}C) chains to their final destination. As part of the evaluation process in future phases of this procurement, suppliers may be required to demonstrate the experience and capability to leverage Good Manufacturing Practices and Good Distribution Practices, comply with the Food and Drug Act, and collaborate effectively with international vaccine manufacturers and suppliers, miscellaneous Canadian service and product providers, as well as federal, provincial and territorial stakeholders.

It is anticipated that vaccines will arrive in Canada in a phased or sequenced manner throughout 2021, where the initial phase of roll-out will have a limited availability of supply. Deliveries will occur throughout the calendar year, and may be extended into 2022. The final number and quantities of vaccines may change over time. There may be additional vaccines to come in the future, the specifications and handling requirements for each will be communicated to the LSP in a timely manner.

Distribution of vaccines will be dependent on approval/authorization from Health Canada, recommendations by the National Advisory Committee on Immunization, and federal, provincial and territorial jurisdictions' plans for distribution. The selected LSP must have the resources and capability to safely deliver, manage and dispose of dry Ice at each designated point of administration for the ultra cold -80^{o}C vaccine. The LSP must be prepared with contingency plans and capabilities, to assist at any stage of this ultra-cold chain.

The LSP must have the capability and capacity to pick up the frozen vaccines from international manufacturers by aircraft. PHAC will be the Importer of Record for this vaccine. The LSP will be required to comply with the applicable export regulations in the country of origin, and ensure all export documentation is in good order. Similarly, the LSP will be required to ensure that all Canadian import documentation is in good order, and that records and/or certifications that are necessary for the distribution of vaccines to and across federal, provincial and territorial jurisdictions, are available as required. Maintaining its frozen state at all times, the LSP must safely and accurately store, manage, account-for, warehouse, track & trace, data-log and distribute this vaccine by air and/or road as necessary to several locations within each federal, provincial and territorial jurisdiction, including to remote and isolated communities. The LSP must ensure close communication and collaboration with PHAC, jurisdictional, and (each) destination authorities to ensure the smooth hand-off of the vaccine in the uninterrupted frozen chain of custody.

The remaining vaccines must be managed within the 2^{o}C to 8^{o}C cold chain at all times. In some cases, the manufacturer will deliver vaccine to specific locations to be determined by federal, provincial and territorial jurisdictions. The LSP must be prepared with contingency plans and capabilities, to assist at any stage of this cold chain.

Other manufacturers will deliver vaccine to one or more primary/regional destination points in Canada. Maintaining its cold state at all times, the LSP must safely and accurately store, manage, account-for, warehouse, track & trace, data-log and distribute this vaccine by air and/or road as necessary to several locations within each federal, provincial and territorial jurisdiction, including to remote and isolated communities. The LSP must ensure close communication and collaboration with PHAC, jurisdictional, and (each) destination authorities to ensure the smooth hand-off of the vaccine in the uninterrupted cold chain of custody.

Vaccine product safety and security are of paramount importance throughout the supply and distribution chains. All facilities, equipment, processes and procedures related to the storage, handling and distribution of vaccines will be adopted within safety systems and programs to prevent product loss and damage. COVID-19 vaccines will be safeguarded at all times as high value assets and high value targets for criminal elements. Chain of custody will be exercised at every step in the management chain, and the physical security of vaccine both in the custody of warehouses and during transportation will be assured and accounted for at all times. Canada may ask suppliers to articulate their security plans and risk management strategies.