

3.17 REPLACEMENT OF THE CANADIAN WEATHER RADAR NETWORK

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On February 28th, 2017 Canada's Minister of the Environment and Climate change announced investments to modernize Canada's weather-forecasting infrastructure. As part of this initiative, an \$83-million contract was awarded to Selex ES GmbH for 20 new weather radars that are to be built across the country by 2023, the first installation having been completed this past fall.

This exciting multi-year infrastructure project aims to replace the existing mixed national network of aging and obsolete single-polarized radars with new, modern, dual-polarized systems. Canada's existing network consists of 31 weather radars, including two radars operated in partnership with the Department of Defence and one owned by McGill University. One additional radar site will be added to provide new coverage in the Lower Athabasca region of Alberta. The contract also includes options to replace up to 13 additional existing radars in the network, within the same timeframe.

Accurate weather information is critical to the health, safety and economic prosperity of Canadians; as well as to security, defence, emergency management, and search and rescue. A new, modernized, sustainable, and reliable weather radar network is a central element of Environment and Climate Change Canada's monitoring infrastructure.

The approach used in designing this network modernization involved many factors, such as climatology, qualitative and quantitative user requirements, and lessons learned from over 30 years of operating and supporting the existing network.

A procurement strategy that included early consultations with industry was used to ensure the competitive solicitation balanced the desired system performance and features against what was available from the industry in a field proven "turn-key" weather radar system.

In sharing the effective strategies and lessons learned during the planning, procurement, and early implementation stages of this project, the Meteorological Service of Canada aims to provide the radar community with information that can be leveraged by other services, and industry, to inform future large scale national weather radar network installations.
