TANK TRUCK FLEET MANAGEMENT SYSTEM FOR CEYLON PETROLEUM STORAGE TERMINALS LIMITED

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ABSTRACT

Downstream petroleum industry in Sri Lanka is basically divided into two major wings "Terminating and Marketing". Ceylon Petroleum Corporation (Ccypetco) and Lanka Indian Oil Corporation (LIOC) arc predominantly engaged in Marketing Business whilst engaging themselves in a lesser magnitude of about 5 % in Terminating Business whereas Ceylon Petroleum Storage Terminals Limited (CPSTL) which is a joint venture of CPC and LIOC is totally engaged in the Terminating Business. CPSTL is responsible for the supply of refined petroleum products in bulk to dealers, consumers or to the island wide sub storages of CPSTL called petroleum depots.

By virtue of the laws applicable to the Terminating Business in Sri Lanka CPSTL is authorized to carry out 95% of the distribution of refined petroleum products in the country. Approximately 80% of bulk fuel deliveries is carried out by CPSTL by using tank trucks either from the main two petroleum terminals; Kolonnavva and Muthurajawela or from the island wide depots.

Timely supply of correct quantity of refined petroleum products preserving the original quality in the hands of the recipient is of paramount significance in meeting the petroleum energy demand of the country. With the escalation of price of crude oil and refined petroleum products higher incidence of malpractices is on records committed by the tank truck operators transporting fuels.

Given this scenario it is of cardinal importance for the CPSTL to ensure that the refined petroleum products delivered by road tankers reach the destinations on time with coracle product quality and quantity. The malpractices and breach of discipline committed by Tank truck Operators usually require extra time, conducive locations and avoidance of being tracked.

It is envisaged that the Fleet Management System developed on "Global Positioning System"(GPS) and "Global System for Mobile Communication" (GSM) Technologies would be capable of providing solutions to the array of problems encountered by CPSTL management with regard to the difficulty in monitoring tank truck movements while the cargo is on transit.