GEOFENCE TASK FORCE CHARTER

I. BUSINESS CASE / PROJECT NEED

Today's intermodal system consists of a complex network of numerous intermodal terminals across North America. These terminals play a critical role in supply chain and goods movement between transportation modes. Every intermodal terminal has a large number of direct and in-direct stakeholders, public and private, including terminal owner; terminal operator; motor carriers, logistic/transportation intermediaries, ocean carriers, and beneficial cargo owners interchanging traffic; and vendors providing critical services (e.g., maintenance & repair, fuel, and parts).

While terminal directories already exist, it is important for the industry to develop and maintain a set of standard terminal geofences for the purposes of defining actual (and virtual) terminal limits' identifying key operational areas; highlighting restricted zones and safety-sensitive areas; supporting collection and measurement of KPIs; and collecting and exchanging data for the purposes of improving efficiency, productivity, ROIC and safety for all stakeholders. This can extend to government agencies responsible for maintaining, improving, and expanding surface and water infrastructure capacity serving intermodal terminals.

II. GOAL STATEMENT

The goal of the task force is to collect -- and make available as part of the terminal directory -- terminal geofence coordinates. If readily available, the task force will also collect geofence information for subprocess areas such as gates, parking, and roadability locations. The goal is to facilitate collection and encourage participation to provide terminal geofence data and make it available within the next 12 months for all North American intermodal terminals.

III. WORK PLAN and TIMELINE

The work plan will consist of a multi-phase approach as follows:

- Phase 1: Collect and organize existing data – prepare for process assimilation (End of Aug 2021)
    - Compile master list of location operators, contacts, and target terminals for capture
    - Identification of geofence types / nesting requirements / define roadmap
    - Determine collection, and distribution methodology
    - Define role, rights of Facility Location Operator ("FLO") and seek participation of same (and provide necessary "how to" materials).
    - Define electronic repository
- Phase 2: Determine access to information / authorization levels (End of Oct 2021)
    - Implement electronic repository
    - Which stakeholders can download the data? In what form?
    - Define scope of first data use/analysis case
- Phase 3: Dispute Resolution Process / Missing geofence process (End of Jan 2022)
    - How to resolve disputes on boundaries or coordinates of geofences?

    - How to collect geofence information that is missing, omitted, or needs updating?
    - Who can dispute? Who can submit updated information? Process to approve changes/disputes?
- Phase 4: Inclusion of 3rd party GIS data (End of March 2022)
    - Connectivity to 3rd party platforms?
    - Who can use? How to access?
- Phase 5: Possible expansion of geofences (End of April 2022)
    - Customer locations
    - External location such as parking areas or depots

IV. DESIRED OUTCOMES

The desired outcome of the task force is to create, maintain, and resolve a standard compendium of intermodal terminal geofences that can be used to universally define terminal boundaries and limits – and to support performance KPIs, sub-terminal geofences to identify terminal sub processes, and data collection points.

By creating a standard set of geofences, the terminals are defined consistently, and can be used for a number of purposes, including navigation (drivers finding their way to the terminal, or finding specific areas in the terminal like roadability), terminal identification for industry research, and ultimately collecting and sharing data for the purposes of improving performance, and having a standardized approach to the collection, analysis and sharing of data.

The best method to share the information with the industry is to include in the terminal directory, as well as make it available on typical cloud sourced GIS.

V. ROLES AND RESPONSIBILITIES

- Task Force Leader: Ted Prince – Chief Strategy Officer & Co-Founder – Tiger Cool Express
- Task Force Members:
    - Andy Adams - Senior Solutions Engineer - Railinc
    - John Allen - Senior Director, Sourcing - CMA CGM America, LLC
    - Nicole Bailey - Manager, Fleet Operations - DCLI
    - Stephanie Bewick - Business Operations Manager - NavTrac
    - Chris Brickley - Vice President of Special Projects - NASCENT Technology, LLC
    - Michael Burton – President - C & K Trucking, LLC
    - Tolga Cankurtaran - Senior Director, Operations - NC State Ports Authority
    - David Clifford - Director of Operations - Ventura Transfer Company
    - Charles Connors – President - H & M International Transportation, Inc.
    - Cliff Creech - Director of Sales Engineering - Phillips Connect Technologies
    - Sal Ferrigno - Vice President - SSA Terminals
    - Nate Graglia - Executive Vice President - Wallport Transit Xpress, Inc.
    - Jeremy Hayden - Senior Systems Engineer - Union Pacific Railroad Company
    - Dave Kalata - Director of Sales, North America - SynchroNet Intermodal Services, Inc.
    - Walter Kemmsies - Managing Partner - The Kemmsies Group
    - Mike Pagel – Manager, Industry Projects & Measures - BNSF Railway
    - Manohar Patwardhan – President - Intelistics Corp.
    - Mark Ratkiewicz - Vice President of Professional Services - NASCENT Technology, LLC
    - Stanley Scofield - Head of Engineering - FlexiVan
    - Gary Van Tassel - Director, Operations Planning and Network Design - CSX Intermodal Terminals, Inc.

    - Miles Varghese - Cofounder & CEO - Cargologik
    - Matthew Wafer – Senior Manager, Intermodal Operations – Union Pacific
    - Matthew Wittemeier - Senior Manager, International Marketing and Customer Relations - INFORM Software Corporation
- Subject Matter Experts:
    - Walker Banks - Transport Software Solutions
    - Doug Owen - Bureau International Des Containers
    - David Roff - Bureau International Des Containers
- Operating Committee Members de-facto:
    - Gerry Bisaillon - Vice President, Optimization, Engineering & Mechanical - REMPREX, LLC
    - Hampton Lee - General Manager, Commercial Systems and Support - South Carolina Ports Authority
    - Mark McKendry - Regional Vice President, Intermodal - NFI Industries