

# **GLC PREPAREDNESS PLATFORM CONCEPT**

Preparedness Pilot Project  
2016 – 2018

# PREPAREDNESS - PLATFORM CONCEPT



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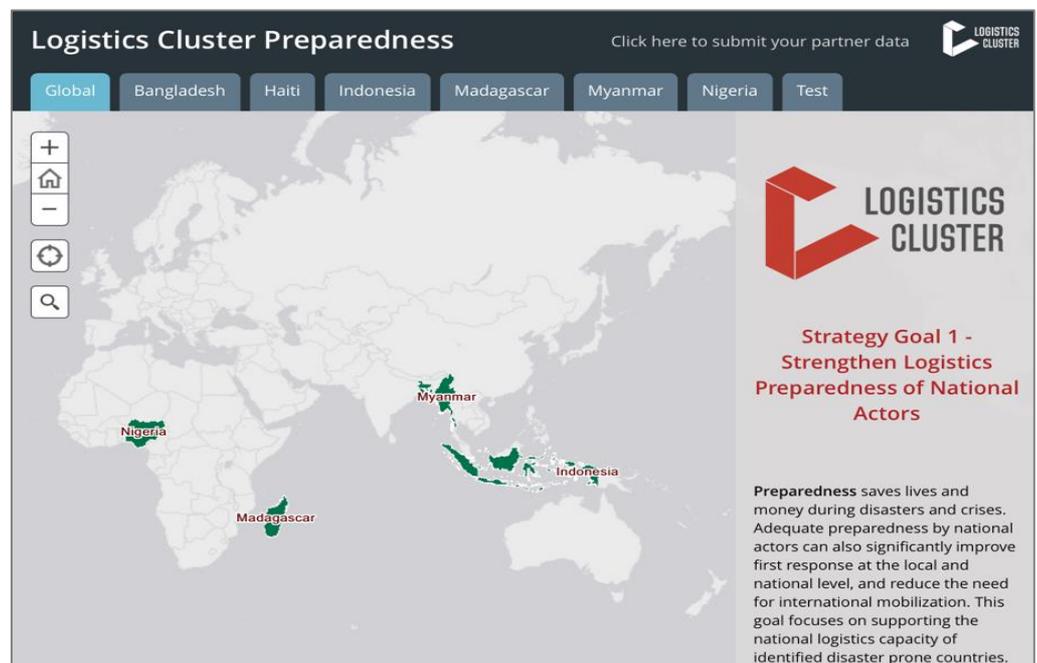
## Introduction

Data preparedness and information readiness are key enablers of the GLC Preparedness pilot project strategy. This concept note will expand and elaborate on the GLC Preparedness Platform concept and provide rationales, benefits and beta-platform screenshots.

## Platform Rationale

The aim of the GLC Preparedness Platform is to provide a dynamic overview of existing Preparedness initiatives on-going both globally and locally within GLC Preparedness pilot countries as well as regions of interest. With a multitude of cross-sectoral preparedness initiatives ongoing at any one time, a lack of visibility and linkages between projects can lead to a duplication of efforts, untended gaps and undetected synergies.

For the purpose of enabling mapping, modelling, simulation, informational and data needs of the GLC Preparedness Project, in-house co-development of the platform by the World Food Programme Geographical Information System Unit and the Global Logistics Cluster is underway. The platform will not only help create an overview of supply chain and logistics preparedness initiatives within



identified GLC Preparedness countries ecosystems, but also **promote long term bilateral linkages** between such projects and initiatives, mitigate initiative impact potential losses, enhance and retain learning and knowledge, serve as a supply chain preparedness information exchange portal, promote and enhance partner collaboration and **act as a scenario planning foundation upon which supply chain configurations of emergency operations can be planned, modelled, stress-tested and expanded upon.**

## Collaboration Enablement

In a system where collaboration is a precursor to coordination, a formal ecosystem and network linkage enhancement platform is required. The Platform can be used to promote multi-sectoral collaboration and assess the function, characteristics and success factors of eventual collaboration models between and amongst participating GLC partners, Governmental and inter-governmental entities, other regional, national and local actors, private sector entities, resiliency system investors (donors), institutions and academia. The Platform will explore how to engage and link with other platforms through Application Programming Interfaces' where feasible and appropriate.

**The platform's added value will be to increase the scale of partner efforts through expanded cluster network connections.** This results in common engagement challenges become easier to overcome, as simultaneous access to a number of GLC Preparedness ecosystem partner's capacities and capabilities become visible. By allowing GLC Preparedness ecosystem members to present a unified voice whilst reducing duplication and negative competition through operational visibility, relationship building through trust and common advocacy efforts are enabled, with enhanced transparency.

The system aims to construct successful humanitarian partnerships and promote stronger and more diverse collaboration. The visibility that will be created, facilitates opportunities for multiple partners to work on joint initiatives as it acts as a collaboration linkage support mechanism and allows collective advocacy avenues to be jointly identified and jointly championed.

### **Humanitarian Preparedness and Response Modelling and Simulation is the answer for:**

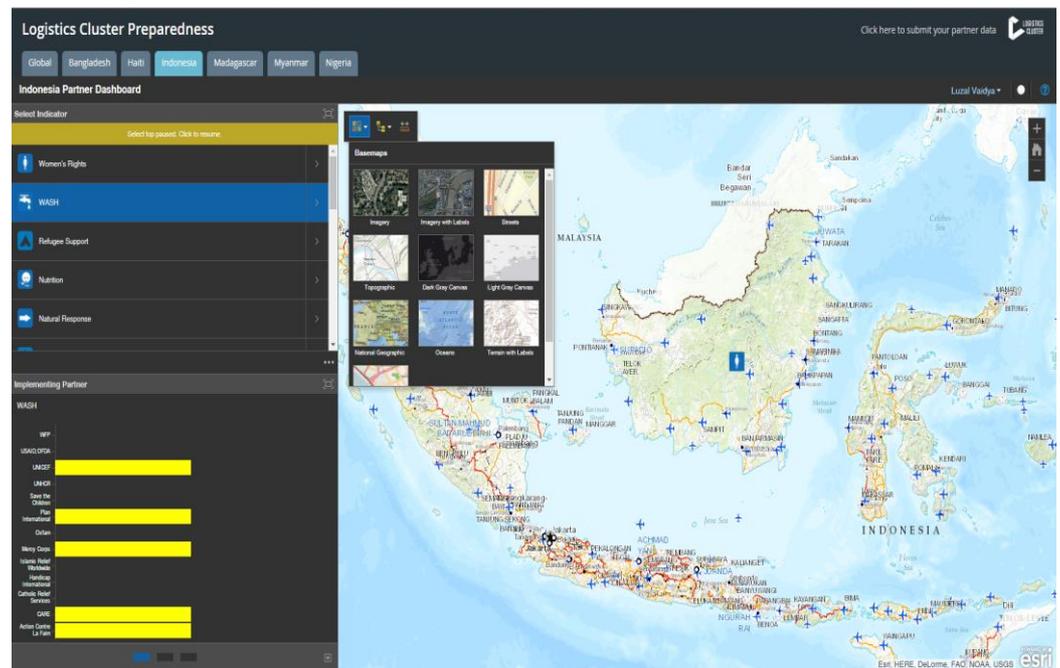
- The complex humanitarian system where it is not possible, prohibitively expensive or risky to conduct live supply chain tests;
- An operational environment that would benefit from **a proactive planning approach and objective analysis** as opposed to fully reactive operations and randomised decision making;
- The complex preparedness and **response system where proactive and predictive thinking are largely untapped and hold value for creating visibility of dynamic process variability.** Modelling and simulations will assist partners to understand how dynamic aspects and components of the system interact with each other and how they could affect overall system performance;
- The complex humanitarian system where there is much incomplete data. Modelling and simulations can be configured to have sensitivity to unknowns and **identify the most important missing data and alternatives;**
- The humanitarian response system where **idea communication and deeper collaboration are precursors to better coordination, transparency and accountability.** The participation and development of models and simulations helps partners and the wide-audience to better understand the system and how their organisations supply chains fit within it.

### **A Niche Supply Chain Preparedness Innovation**

The platform will **fill a clear gap in the inter-sectoral preparedness coordination space** and through the innovation, enhances the GLC Preparedness strategy activities, awareness, and promotion and information dissemination. As data size and quality increases, adoption rates rise and promote supply chain thought leadership through creating **visibility for integrative operational opportunities, shared knowledge and learning retention.** Throughout the innovation pipeline, **the platform aims to create a network, of existing preparedness networks.** The platform will aim to facilitate capacities surplus and deficit matching and guide optimum allocation and pooling of resources for joint problem solving. The platform will assist **multi-sectoral partners to gain a shared understanding of preparedness and Disaster Risk Reduction for resiliency efforts.** It will assist with aligning humanitarian preparedness activities with development initiatives as well as being a 'tool-on-hand' to facilitate the engagement of value-adding non-traditional actors in humanitarian efforts.

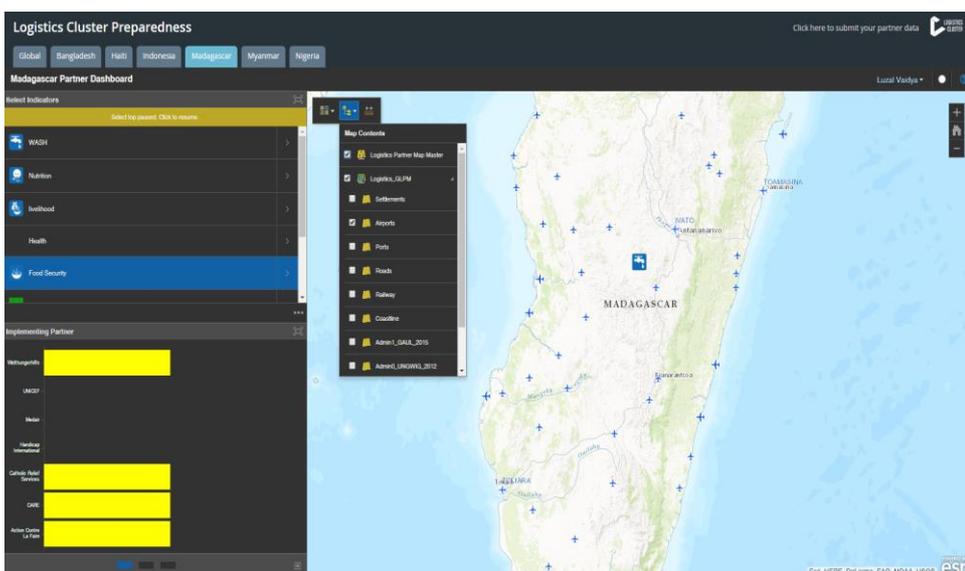
## The Preparedness Webpage: Geo-tagging, Supply Chain Modelling and Logistics Network Configuration Simulation

Currently in the beta testing and design phase, the preparedness webpage is developing from a basic repository and portal to a Preparedness Platform. Partners and field missions will be able to instantly upload and geo-tag their capacities and capabilities – allowing for a more robust, interactive and informative presentation of the current situation in project countries and regions of interest. This will form part of the databank upon which **supply chain modelling and logistics network simulation will be overlaid together with scenario parameters for systems risk and gap analysis.** Mapping, modelling and simulation will be extended further upstream, linking to global routes and consolidation options, as well as downstream with demand fulfilment modelling, to



be derived from scenario building and predictive impact analysis.

Data quality and partner participation in the platform is vital. Apart from supply and logistics data, the platform will also model cost flows where possible, as a means to improve visibility and accountability, and allow for logistics network optimization including taking advantage of environmental efficiencies where possible and feasible.



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## Platform Functionality and Features: Dynamic Mapping Geo-Form - User Driven Information Gathering and Sharing

Accurate and timely information is key to any preparedness and emergency response operation. The Logistics Cluster actively engages in the gathering and dissemination of critical logistics information through its network of information managers, coordination structures, tools and website.

Building upon this strength and tools such as the Logistics Capacity Assessment and new Dynamic Mapping Geo-Form, **the preparedness platform gathers information on preparedness partners, their assets, projects, and activities, and links them together** through high resolution geo-location, thematic areas and supportive logistics information, for easily accessible contact, preparedness and response data, for usage either as part of a larger, or targeted operational network.

## New Perspectives for Enhanced Challenge Solving

Through the portal, partner organizations are able to access, register and update their own information as needed. The dynamic toolset brings together information from different sources allowing preparedness and response partners, whether focused on furthering preparedness and development initiatives or scaling up for a localized or international response operation, to access information, overlay it with DLCA data and high resolution interactive logistics maps for richer and more detailed planning purposes.

## Scenario Building and Response Planning: Coordinated and Collaborative Supply Chain Configuration Set-ups and Testing in a Sandbox Environment

Bringing together logistics preparedness initiatives and stakeholders, the platform will act as a powerful **coordination enabler and advocacy tool**, able to help identify where current preparedness initiatives are focused, and highlight possible new avenues for preparedness investment and strategies on overlaid country risk profiles. Scenario building and 'what-if' analysis will be enabled and supported by the platform features and analysis tools (Page 8).

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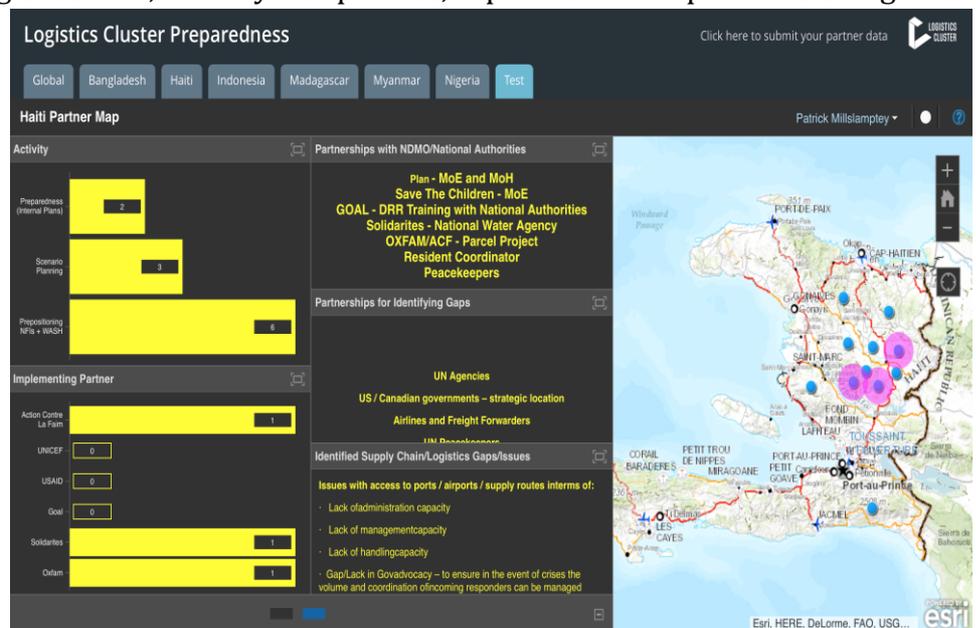


The value added combination of both mapping current activities, and identifying potential areas for preparedness investment, is that:

- GLC ecosystem partners will have in their possession a **wealth of regional and in-country logistics knowledge and data** to draw upon (DLCA, preparedness country-level working group minutes, pertinent preparedness documentation, guidance, operational & response plans, shipping info etc.) and which can **be incorporated quickly into any planning scenario**;
- The ability to **create models** for carrying out appropriate calculations;
- Provide the ability to **compare and evaluate different scenarios and monetize the impacts** of different scenarios;
- A **seamless transition from preparedness to response actions on a single platform**;
- Strengthen the **coordination between National Disaster Management Organisations, Private Sector Humanitarian Platforms, National Clusters and the humanitarian sector** through the provision of a platform upon which to share country level data, locally produced information, identify local partners, assets and spare capacities, and assist in policy development and impact investments;
- A configurable structure that can be changed rapidly to react to a changing environment;
- An established network of in-country preparedness actors able to quickly identify logistics gaps;
- An overview of in-country and prepositioned stocks and supply chains with the ability to quickly mobilize additional resources;
- Development partners can gain visibility on value added preparedness activities, or develop funding initiatives focused on **cross functional and complementary preparedness projects** and avoid the duplication of activities;
- Coupled with updated logistics data, country risk profiles, capacities and capabilities of logistics partners,

**highlight areas where preparedness initiatives are lacking and could be developed or require strengthening.**

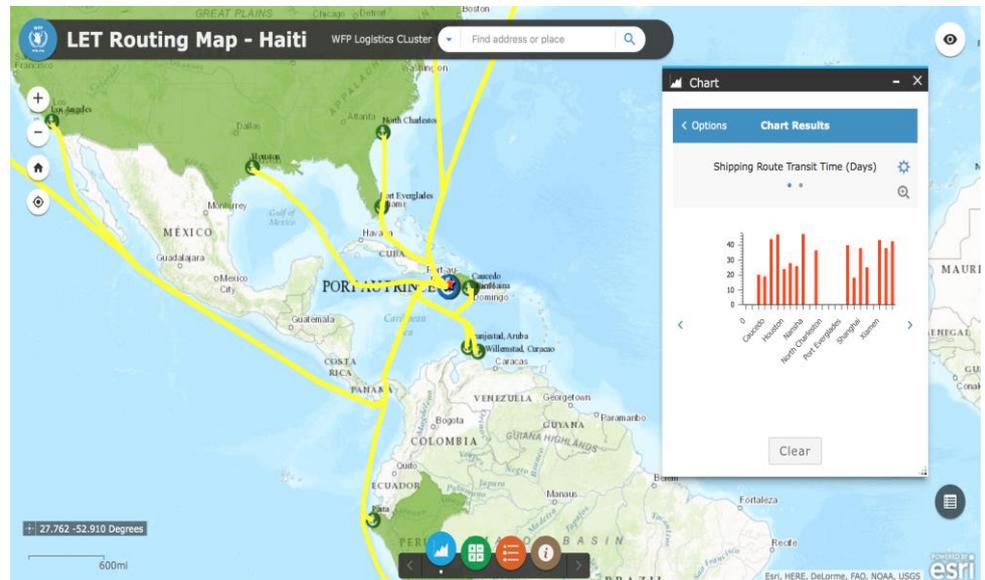
The object-based software with a unique mix of simplicity and flexibility **lets users quickly grasp field realities,** optimise performance of dynamic systems and identify and mitigate risk at a rapid pace.



## Platform Modelling as a Databank for Scenario Simulations

The GLC Preparedness Platform will serve as a data gathering and data bank for the modelling and simulation tool which will provide a platform to the wider humanitarian community for individual and joint use, as well as search for supply chain gridlock prevention avenues by creating visibility on:

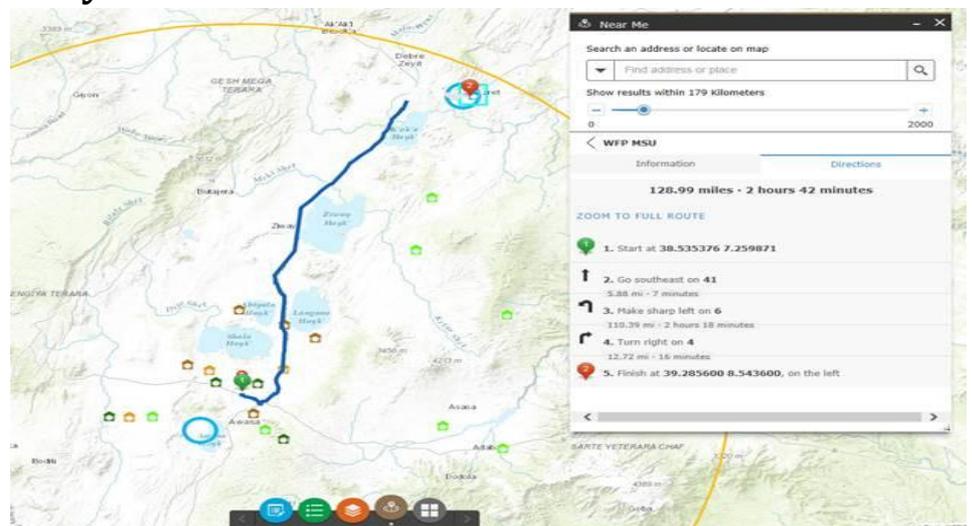
- Network Integration: Logistics **Gaps**
- Node Velocity: Supply Chain Flow **Bottlenecks**



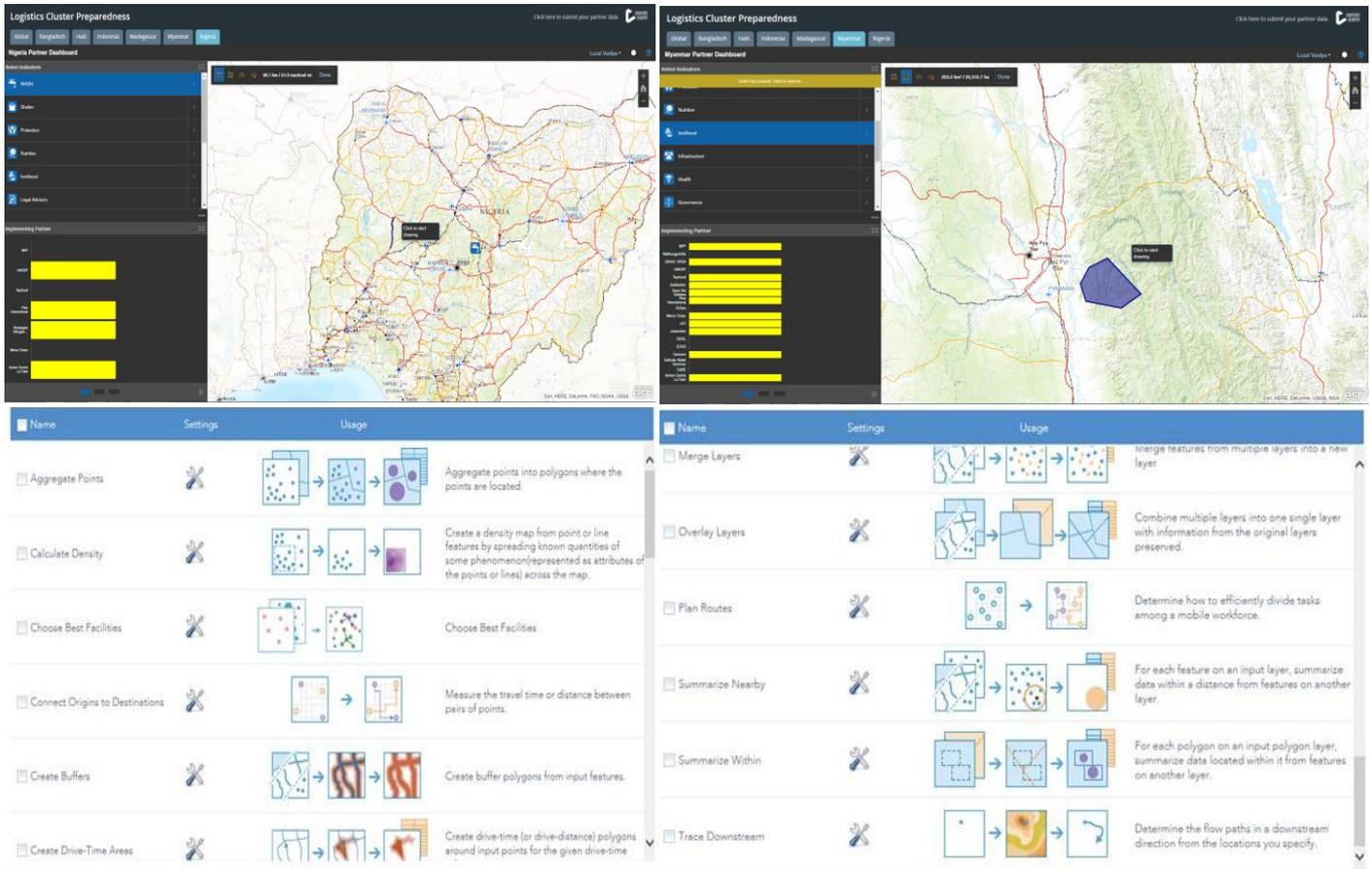
Partners plugging into the platform will be able to model, stress-test, optimize, compare and cluster their own supply chain configurations with that of other users.

## Platform Features and Analysis Tools:

- Current Preparedness Initiative visibility;
- Proximity Analysis & Measurements (Near Me Tool - Multimodal Distance & Time;
- Standing capacity visibility (Who/What/Where - incl. logistics assets/stockpile/pre-positioning)
- Scenario planning event simulation and 'what-if' analysis;
- Supply chain node resilience and velocity monitoring;
- Demand fulfilment modelling (node-to-node & last-mile where possible);
- Supply chain flow visibility (cargo/data/cost);
- Modality and corridor prioritization model (Multimodal Decision Support);
- Model logistics networks and applicable environmental data quickly and accurately using customizable objects in a code-free environment;
- Optimise network and system performance with objective data;
- Identify and mitigate critical risks;
- Provide visibility and a basis for residual risk advocacy strategies;
- Assist with operational cost transparency and investment accountability



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## Further Information

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