

Supply Chain Analysis and Intelligence Tool

SCANIT

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Supply Division



Background

System design is an evidence-based approach to analyzing and modifying supply chain components, such as storage and distribution, with the goal of improving the availability of and access to essential products.

The challenge

System design analysis typically requires **substantial resources** – in terms of finances, data, time and technical expertise – to communicate the benefits and propose solutions that contributes to improving performance.

The solution

SCANIT, jointly developed by UNICEF and Llamasoft, uses readily available data to model supply chain alternatives. Resulting maps, graphs and tables illustrate the impact of redesign options for decision-makers to advocate for change.

What is SCANIT?

- A system design tool for visual analysis of in-country supply chains, including storage, distribution and the overall network.
- A tool that provides national and subnational stakeholders with a clear understanding of the trade-offs between different supply chain scenarios.

How can SCANIT support countries?

With SCANIT, national and subnational stakeholders and technical partners can:

- **Visualize** and model current and alternative supply chain scenarios
- **Compare** current and alternative scenarios using supply chain and programmatic indicators
- **Understand** and easily communicate outputs of current and alternative scenario analyses



What types of analysis can be carried out using the tool?

The tool can support the following alternative system design analysis:

Alternative scenarios
New product introduction: including integration of commodities
Inventory holding points: increasing/ decreasing storage capacity/points
Stock levels: varying stock levels at different supply chain points
Distribution flow network: level jumping and optimal distribution network
Transport operations: change delivery frequency or direct delivery

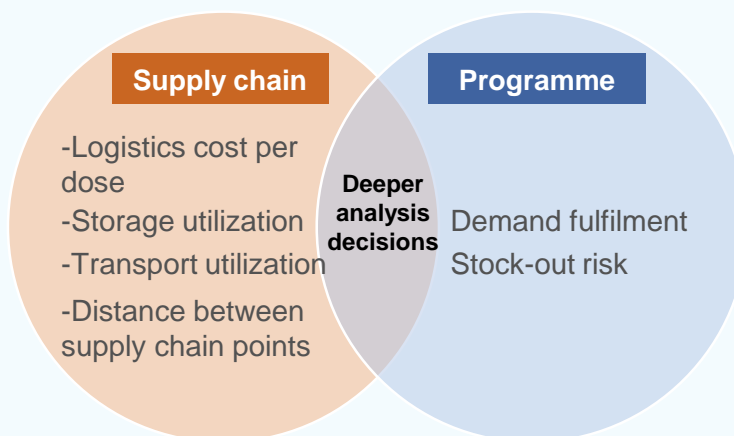
What data does the tool require?

SCANIT requires readily available country data from standard sources such as:

- **Site/service delivery points location** – e.g., Health Facilities Master List, Cold Chain Inventory
- **Product characteristics** – e.g., from Effective Vaccine Management Assessment
- **Service delivery schedule** – e.g., from national schedules (such as immunization)
- **Distribution assets and schedule** – e.g., from Cold Chain Inventory
- **Logistics cost data (fuel, per diem, personnel)** – e.g., from comprehensive multi-year strategic plans (cMYP) costing tool, Cold Chain Inventory, human resources data

What indicators does the tool use?

SCANIT uses supply chain and programmatic proxy indicators to inform outputs and deeper analysis.



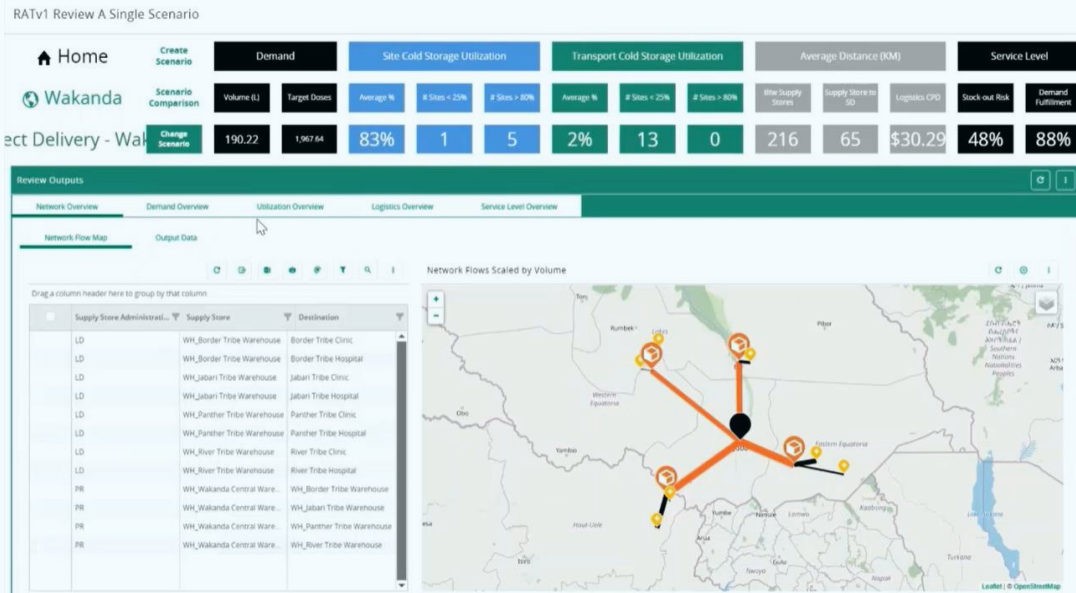
Where should SCANIT be used?

- To provide dedicated **technical support** e.g. introduction workshop and initial system design analysis
- To support Effective Vaccine Management (EVM) **Continuous Improvement Plans**
- To identify initial **integration options** (e.g. storage/distribution capacity) across multiple supply chains
- To incorporate **design analysis into CCE investment decisions** e.g. CCE OP applications or preparing for a vaccine introduction

What outputs does the tool provide?

SCANIT produces key performance indicator comparison charts, network maps, summary tables and graphs to support alternative scenario analysis, such as:

Output 1: Reviewing **single scenario** analysis results



Output 2: Comparing **multiple scenarios** analysis results



Who can use SCANIT?

In-country stakeholders and partners have access to the tool on a time-limited basis. In consultation with UNICEF Regional and Country Offices and technical partners, priority access would be given to countries with existing system design engagements.

UNICEF
Technical Cooperation on
Supply Chain Strengthening
Marmormolen 51
2100 Copenhagen
Denmark

Telephone: +(45) 45 33 55 00
Email: systemdesign@unicef.org
www.unicef.org

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