INDIGO User Interface

INDIGO User Interface: Intelligent 5G Networks Designed and Integrated for Globalized Operations

Riju Dey and Anya Trumbach
Advisors: John Drogo, Dr. Zussman

Agenda

1. Introduction
    a. What is INDIGO?
    b. An Illustrative Example
2. User Interface
    a. System Architecture
    b. UI Mockup
3. Implementation Details
    a. Frontend implementation
    b. Backend implementation
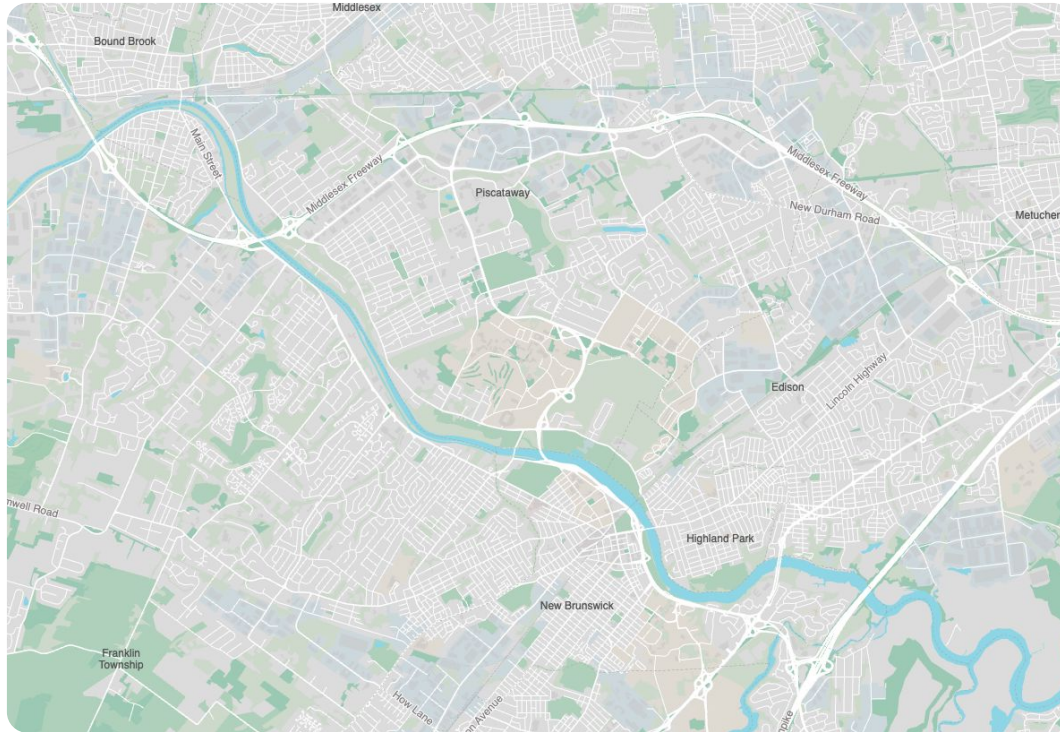4. Conclusions and Next Steps

What is INDIGO?

"Intelligent 5G Networks Designed and Integrated for Globalized Operations"

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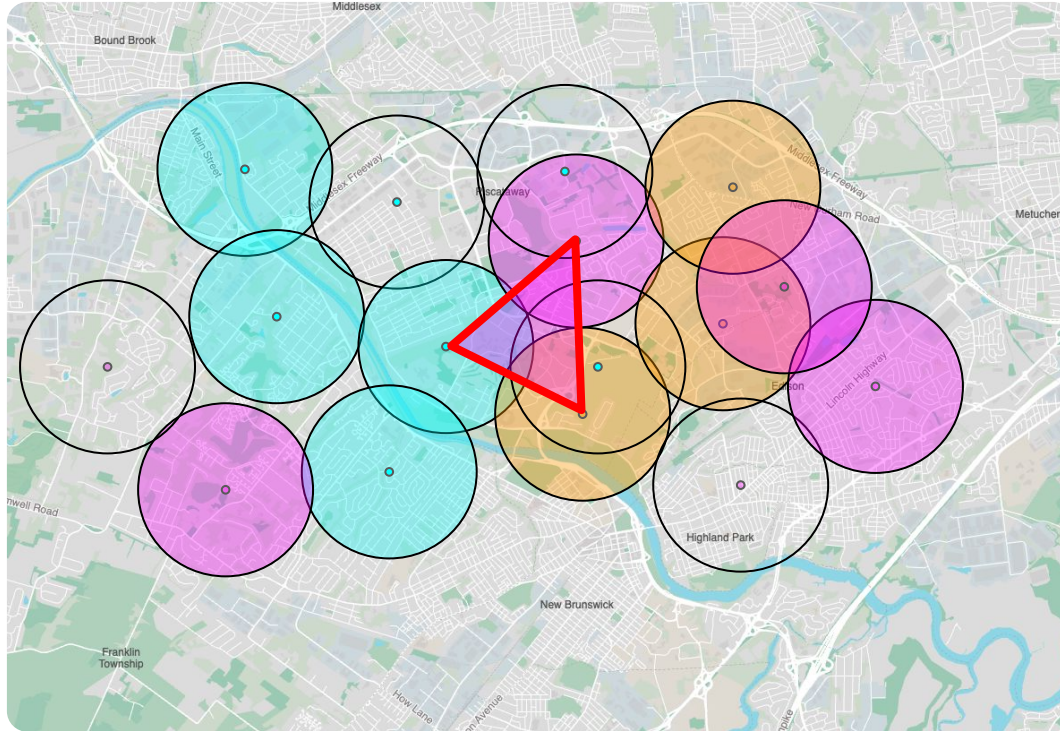
Ok, but what does that mean?
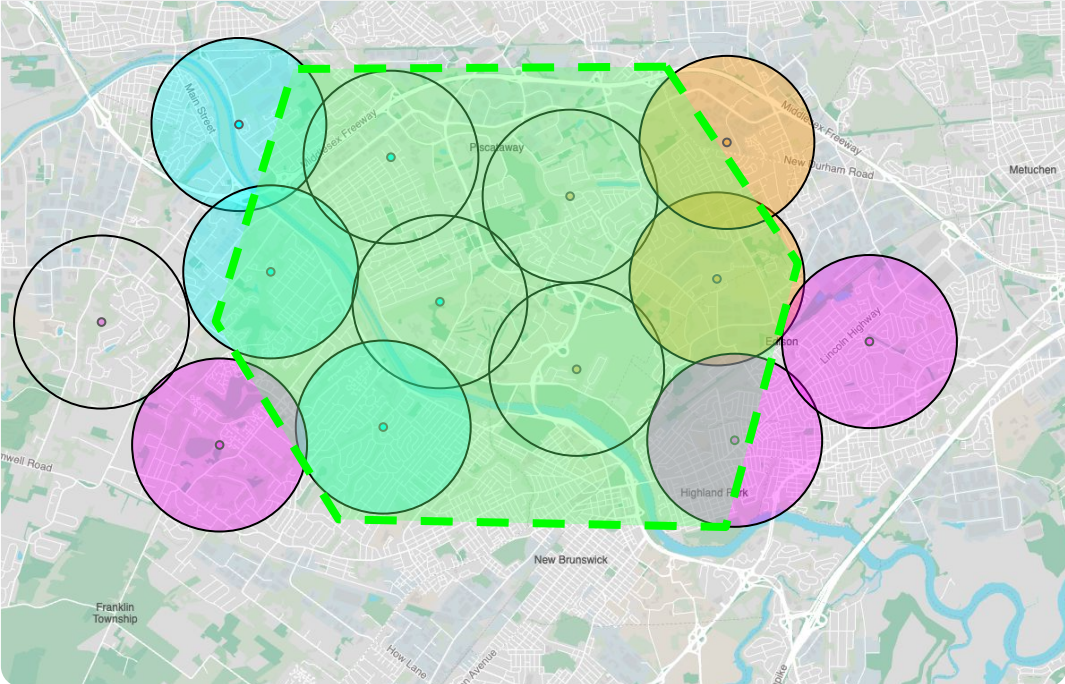
Example: Natural Disaster

New Jersey

Example: Natural Disaster

Network coverage, where colors indicate different operators

Example: Natural Disaster

The red area is not covered by any one base station

Solution: INDIGO

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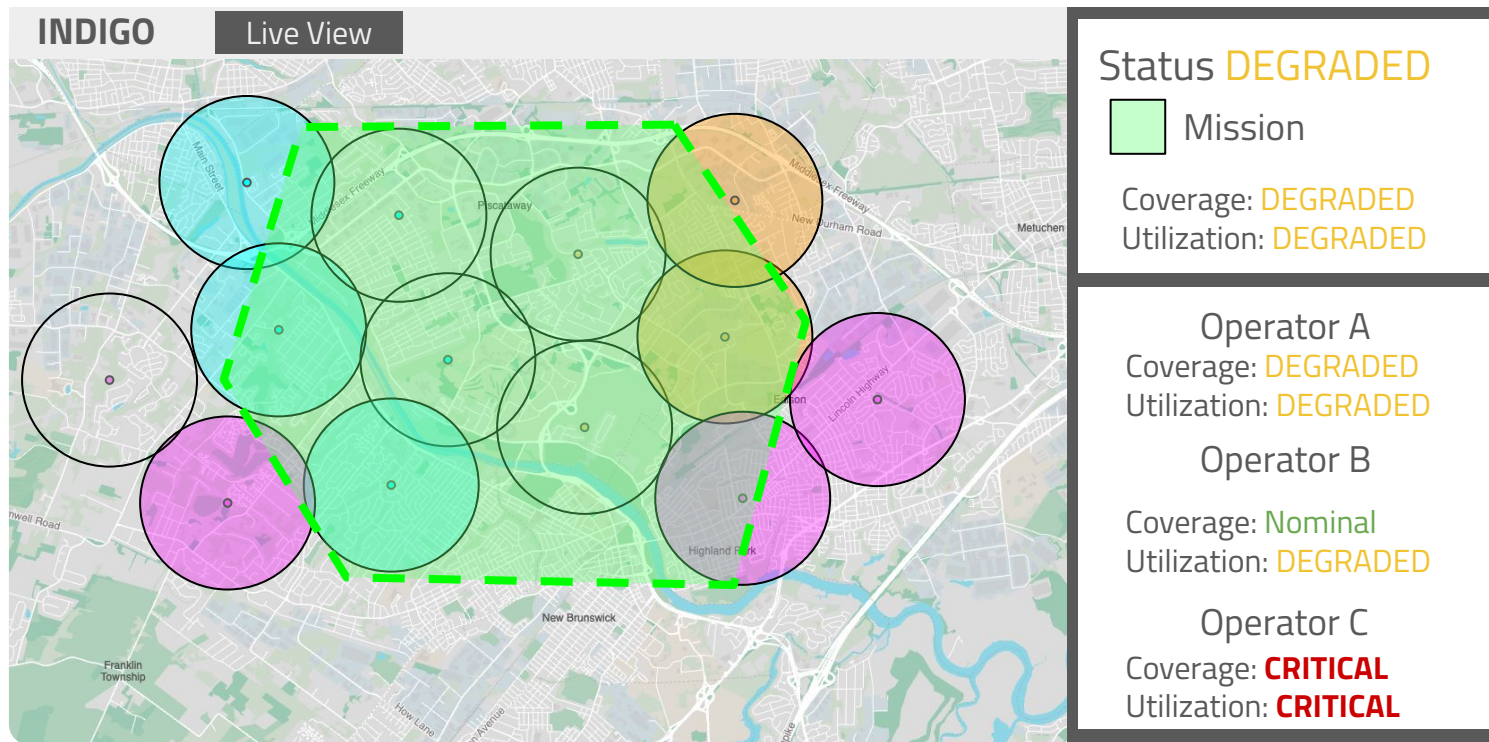
What is INDIGO?

A System to Ensure Secure & Resilient Connectivity for NATO Forces and First Responders in a Crisis

Two Critical Services

Multi Operator SMO (MO-SMO) - The INDIGO system aggregates and coordinates information across operators (think Verizon or AT&T)

Mission Planner - Application that draws information from the MO-SMO

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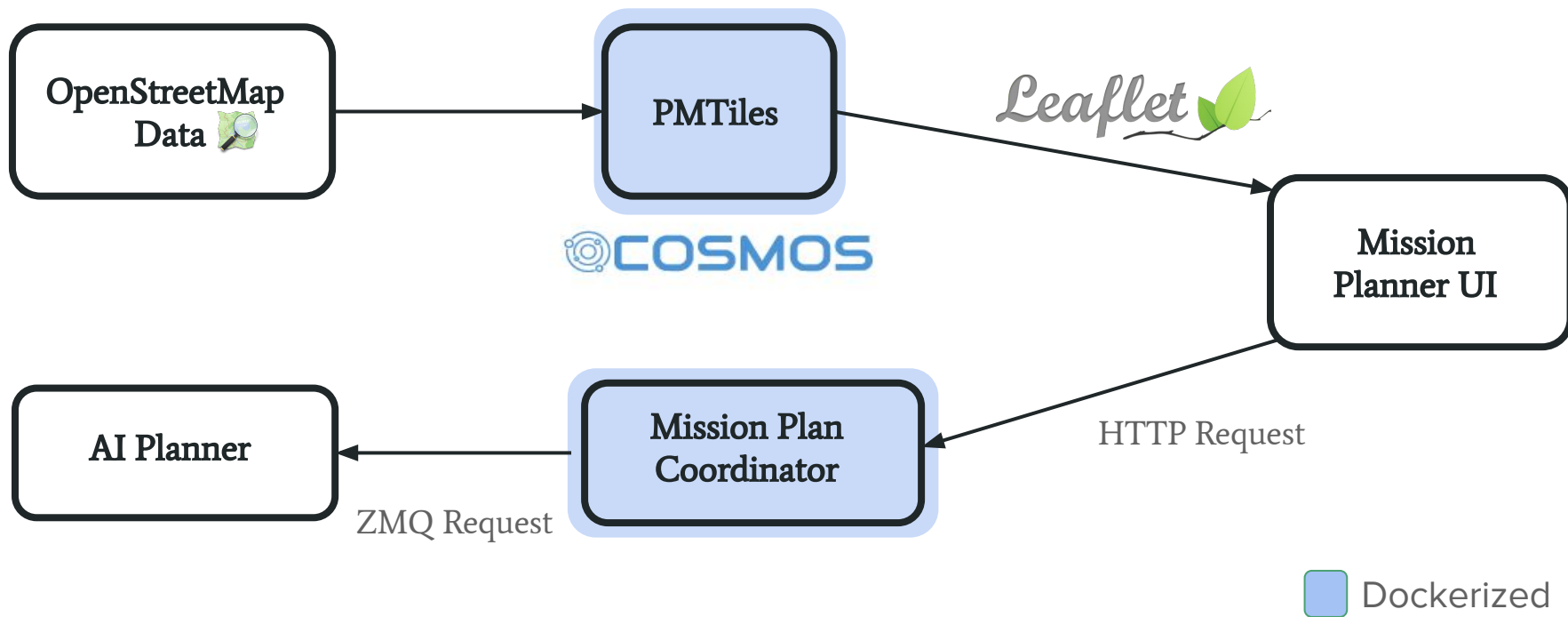
Two Critical Services

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Mission Planner - Application that draws information from the MO-SMO

Mission Planner UI: Architecture
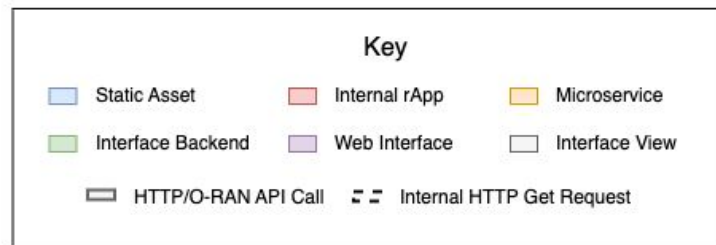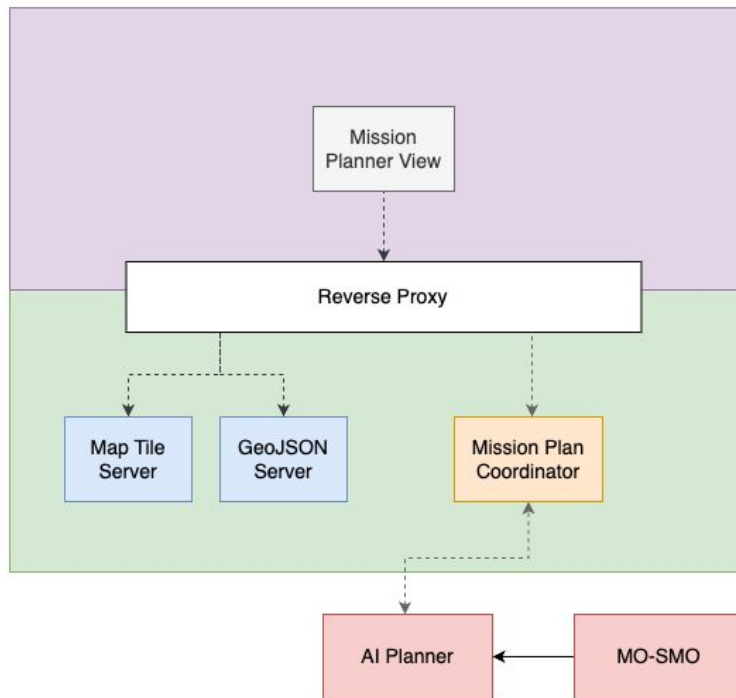
Mission Planner UI: Implementation

Conclusions and Next Steps

The INDIGO project uses emerging open industry standards and increased integration to enable rapid emergency responses
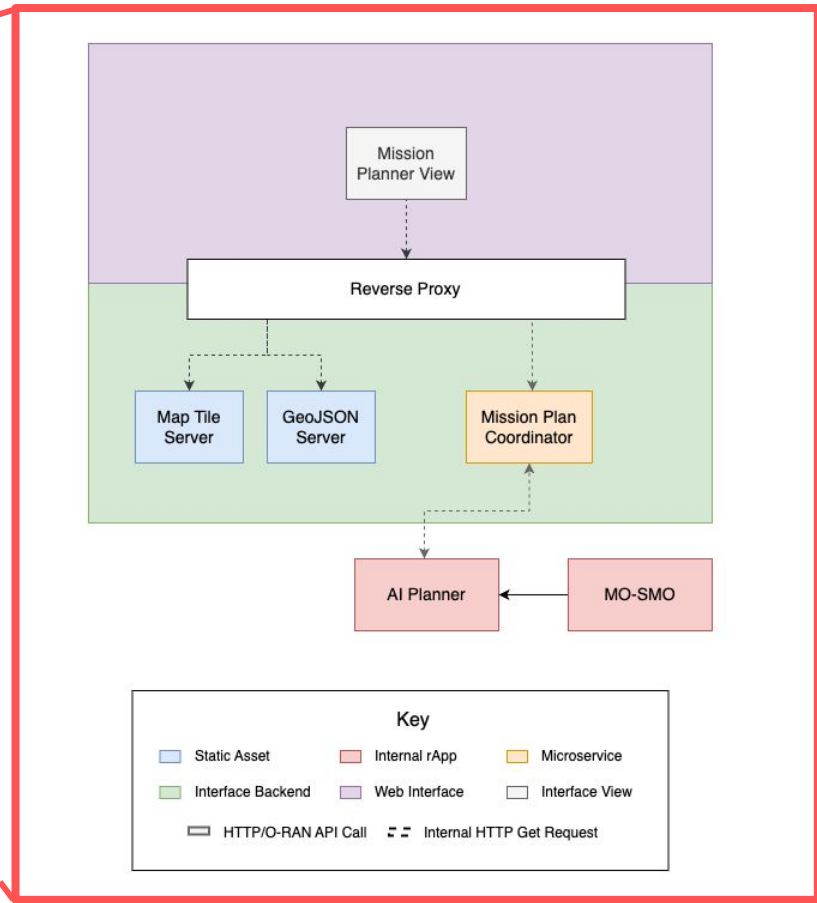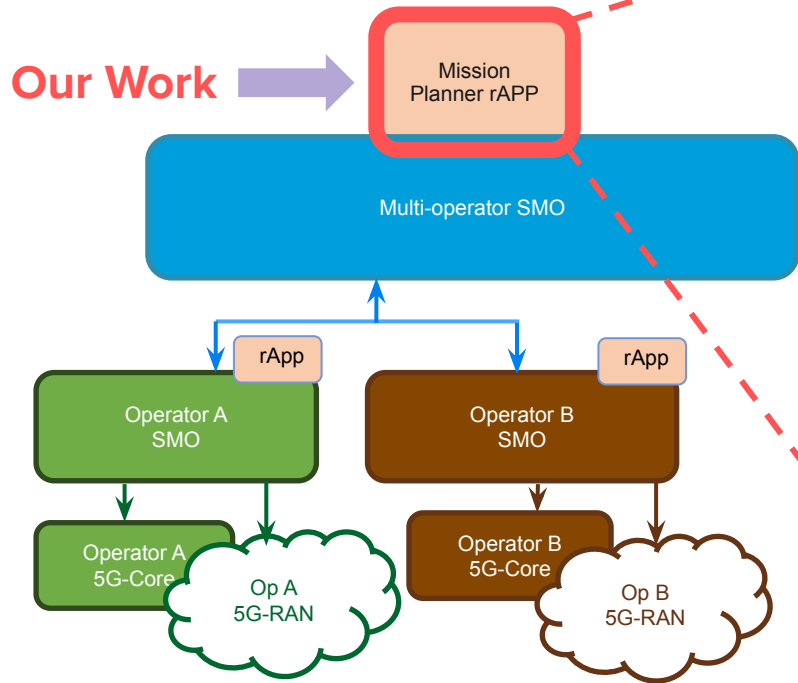
Our next steps include:

1. Bridging the connection between the UI and the AI Planner

2. Hosting servers on COSMOS testbed servers

3. Implementing an nginx reverse proxy as an unified interface

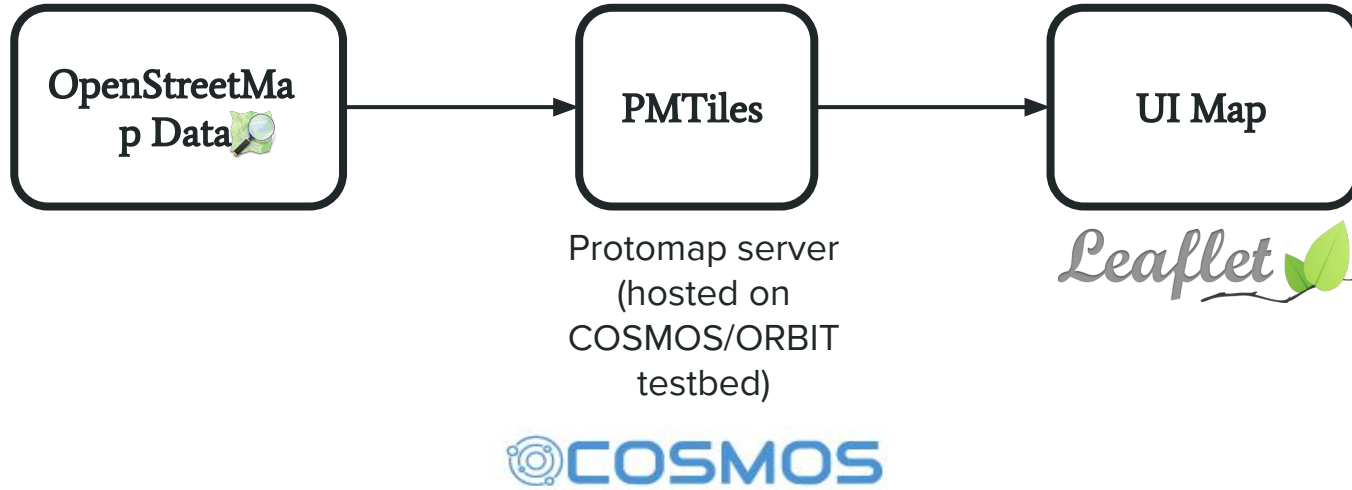Questions?

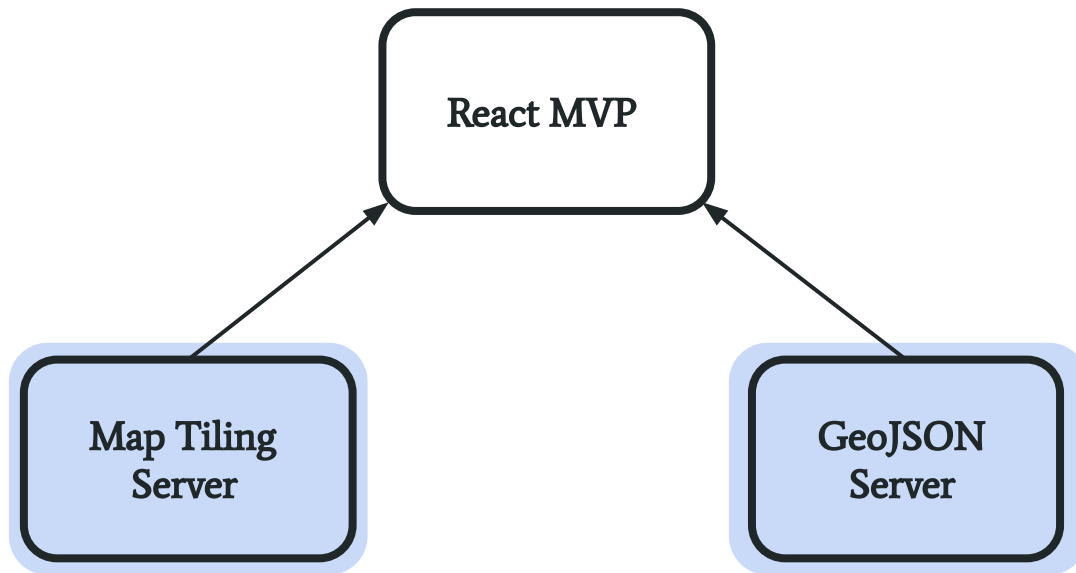# INDIGO Architecture: Where We Fit In

Architecture

Example: Disasters

Problem:

First responders cannot get the network coverage they need.
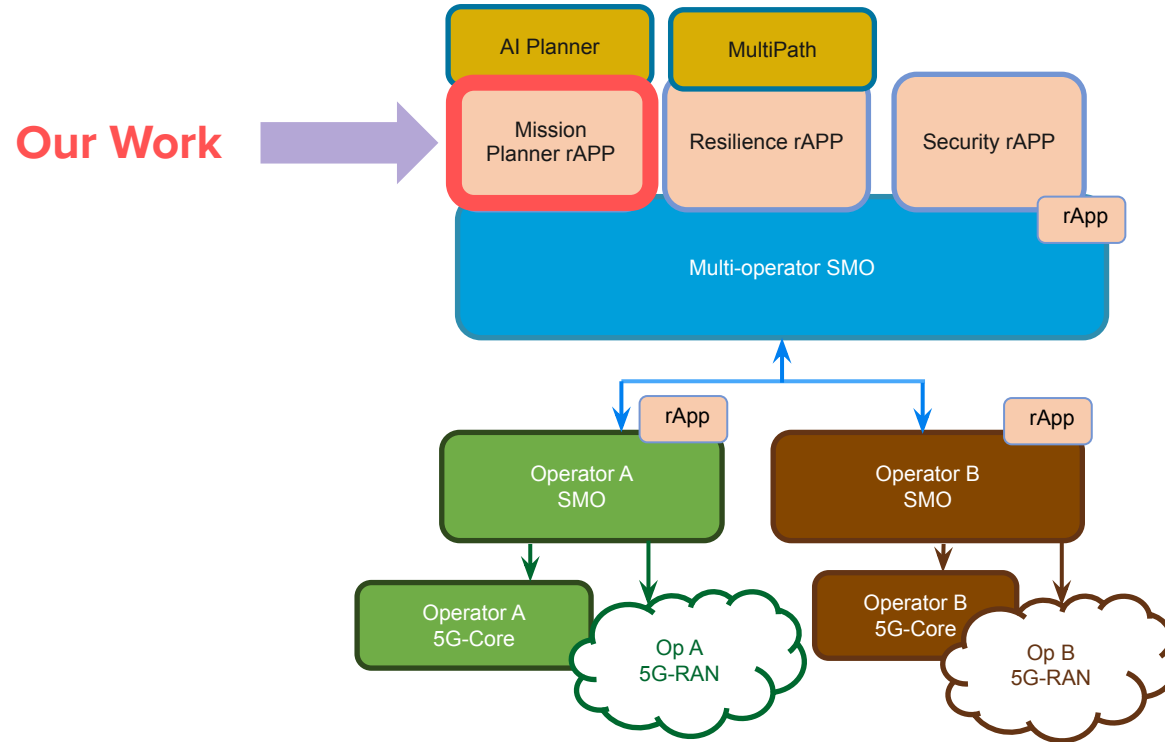
Mission Planner UI: Map Tiling Server

Mission Planner UI: Frontend

Architecture and Where We Fit In

Mission Planner UI: Architecture