



DEG Hackathon: Resource Package



Implementing Beckn Protocol for Energy Use Cases



Note for All Participants

**IMPLEMENTATION OF BECKN PROTOCOL WORKFLOWS
IS MANDATORY FOR ALL SUBMISSIONS.
NON-IMPLEMENTATION OF BECKN WILL NOT BE
CONSIDERED FOR EVALUATION**

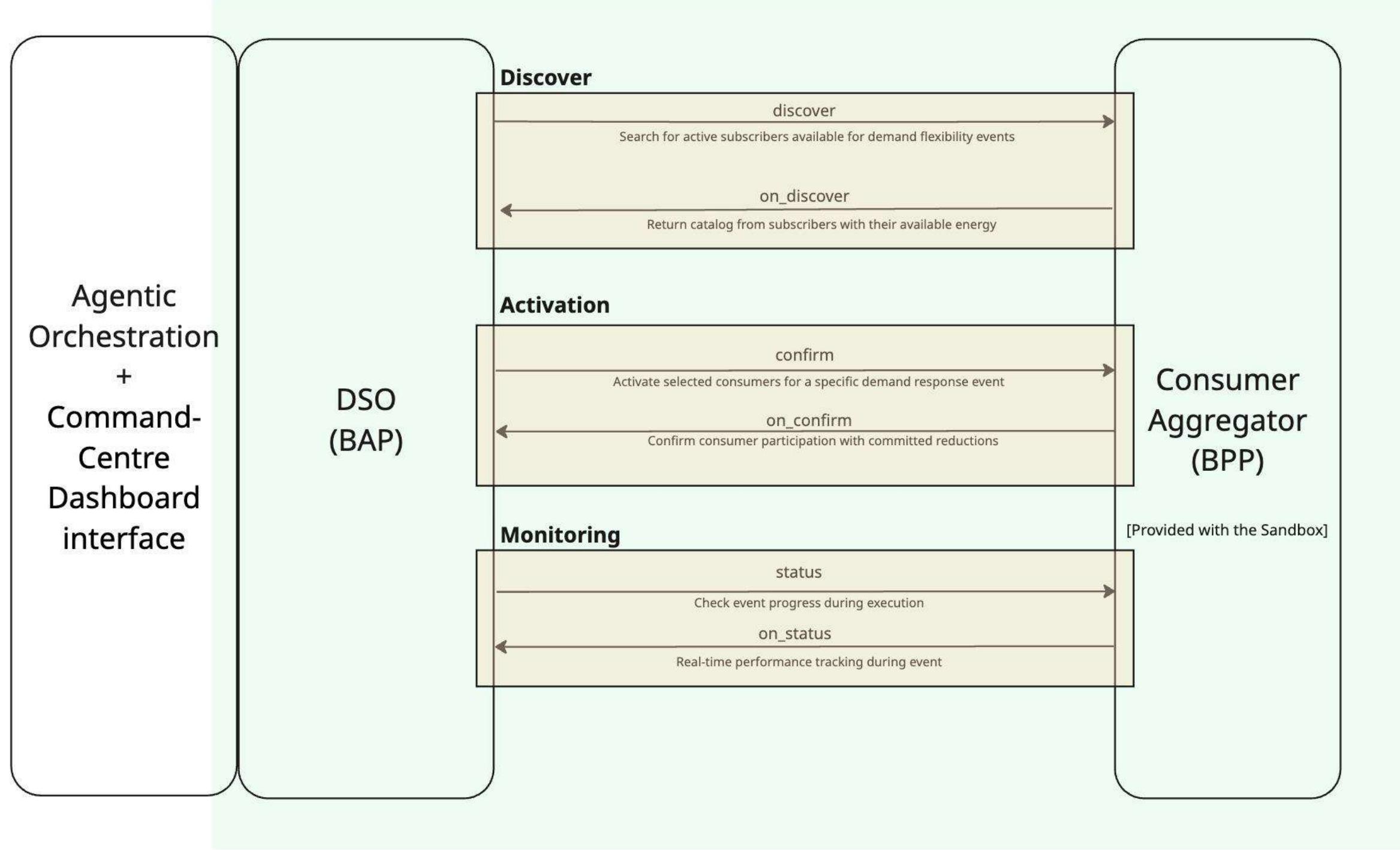
Implementation Guides

SN No.	Use Case	Link to Implementation Guide	Link to postman collection
1	Demand Flexibility	Implementation Guide	here
2	Compute Energy	Implementation Guide	here



Demand Flexibility

Beckn Network

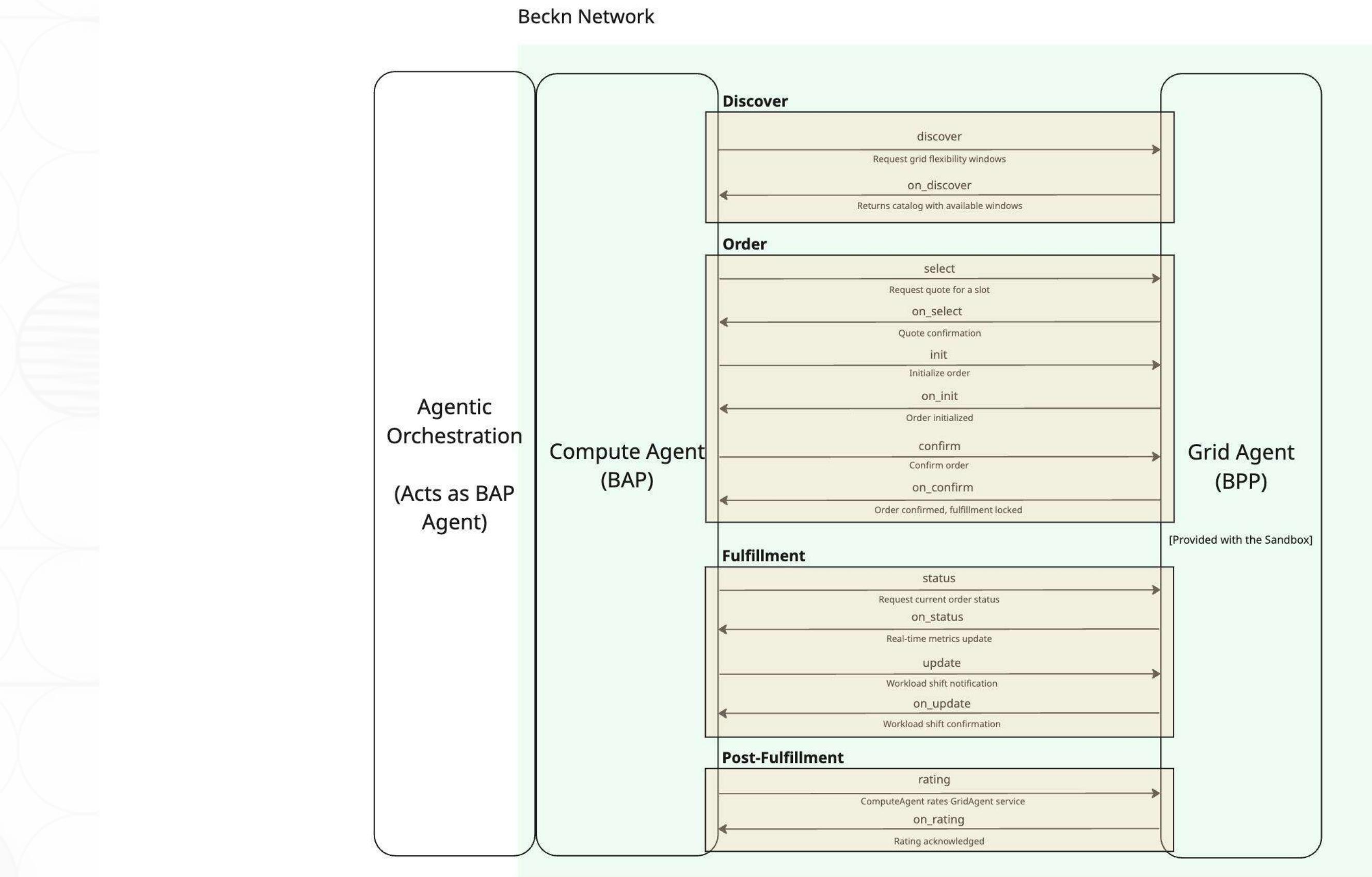


Agentic Orchestration generates Beckn payloads for the DSO (BAP) and interprets the `on_` action callbacks sent by the Consumer Aggregator (BPP).

DSOs (BAP) discover available subscribed consumers who can reduce electricity load or provide supply during peak demand events, activate them for specific events, and monitor their performance in real-time for settlement.

Please find link to implementation guide [here](#)

Compute Energy



Please find link to implementation guide [here](#)

Instructions

Your goal in this hackathon is to build an agentic orchestration system that can interact with RESTful APIs and complete Beckn journeys end-to-end. You will be provided with a Beckn-enabled BAP Sandbox environment. Your agent will operate only as a BAP, and must use the sandbox's APIs to fulfill the given problem statements.

Key Points

- The BAP Sandbox is fully self-contained.
- It already communicates internally with the appropriate BPPs through the Beckn network.
- Your only point of interaction is the BAP Sandbox APIs.
- You do not need to (and cannot) call BPPs directly.

Example

For a demand-flexibility use case:

- To discover active subscribers, your agent sends a discover call to the BAP Sandbox.
- The sandbox will handle the Beckn network flow and return the on_discover response.
- Your job is to orchestrate this journey using your agent.

Your Objective

Build an agent that:

- Understands the provided problem statement.
- Generates and sends the correct Beckn-compliant requests to the BAP Sandbox.
- Handles the sandbox responses.
- Completes the entire Beckn journey through orchestration logic.

Glossary

BAP (Beckn Application Platform)

A consumer-side application that initiates Beckn requests like `search`, `select`, `init`, `confirm`, etc. In this hackathon, **your agent acts as the BAP**.

BPP (Beckn Provider Platform)

A provider-side system that responds to Beckn calls. It sends responses like `on_search`, `on_select`, etc. You **do not interact with it directly**—the sandbox handles this.

Beckn Protocol

An open, interoperability protocol that allows any buyer and seller application to discover, communicate, and transact in a standard way. It defines the request/response flows and schemas.

Open Network

A decentralized ecosystem where multiple BAPs and BPPs can interact freely using a common protocol (like Beckn). No central platform—just open standards.

BAP Sandbox

A simulated buyer-side environment given to you. It accepts Beckn API calls from your agent and automatically communicates with internal BPPs to produce complete Beckn journeys.

Beckn Journey

A sequence of Beckn request/response calls (e.g., `search → on_search → select → on_select → confirm → on_confirm`) that completes a transaction flow.

Beckn Action Calls

Standardized API calls like `search`, `select`, `init`, `confirm`, `status`, `update`, etc., used to complete a journey.

Discovery

The phase where a BAP searches for available providers or services (e.g., using `discover`).

Agentic Orchestration

A system (your agent) that autonomously understands the problem and executes the required Beckn flows by calling APIs in the correct order.