Open Scheduling System
Project Update

NYISO BIC

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Agenda

- Background
  - Challenge
  - Guiding Principles
- Overview
  - What is OSS?
  - Process Comparison
  - Communications
  - Benefits
- Project Plan
  - Timeline
  - Deliverables

Challenge

- Transaction related seams issues present significant challenge to Inter-Regional operations
  - Inconsistent data for common transactions between ISOs
  - Multiple data entry interfaces for single transaction
  - Lack of communication between different software systems
  - Accommodate different market models, including business process, timing, ramp rate, etc.
  - Accommodate procurement of transmission services whether physical or financial
  - Inefficient Inter-Control Area checkout processes

Guiding Principles

- Create an improved architecture that can be used as a blueprint for future applications
- Must have flexibility to quickly accommodate changing Market rules
- Make it easier for MPs to interact with ISOs/RTOs
- Provide immediate benefit to the MPs in a cost-effective manner with minimal impact on current business practices
- Must easily integrate with existing ISO/RTO Market System and be able to migrate to FERC Standard Market Design (SMD)

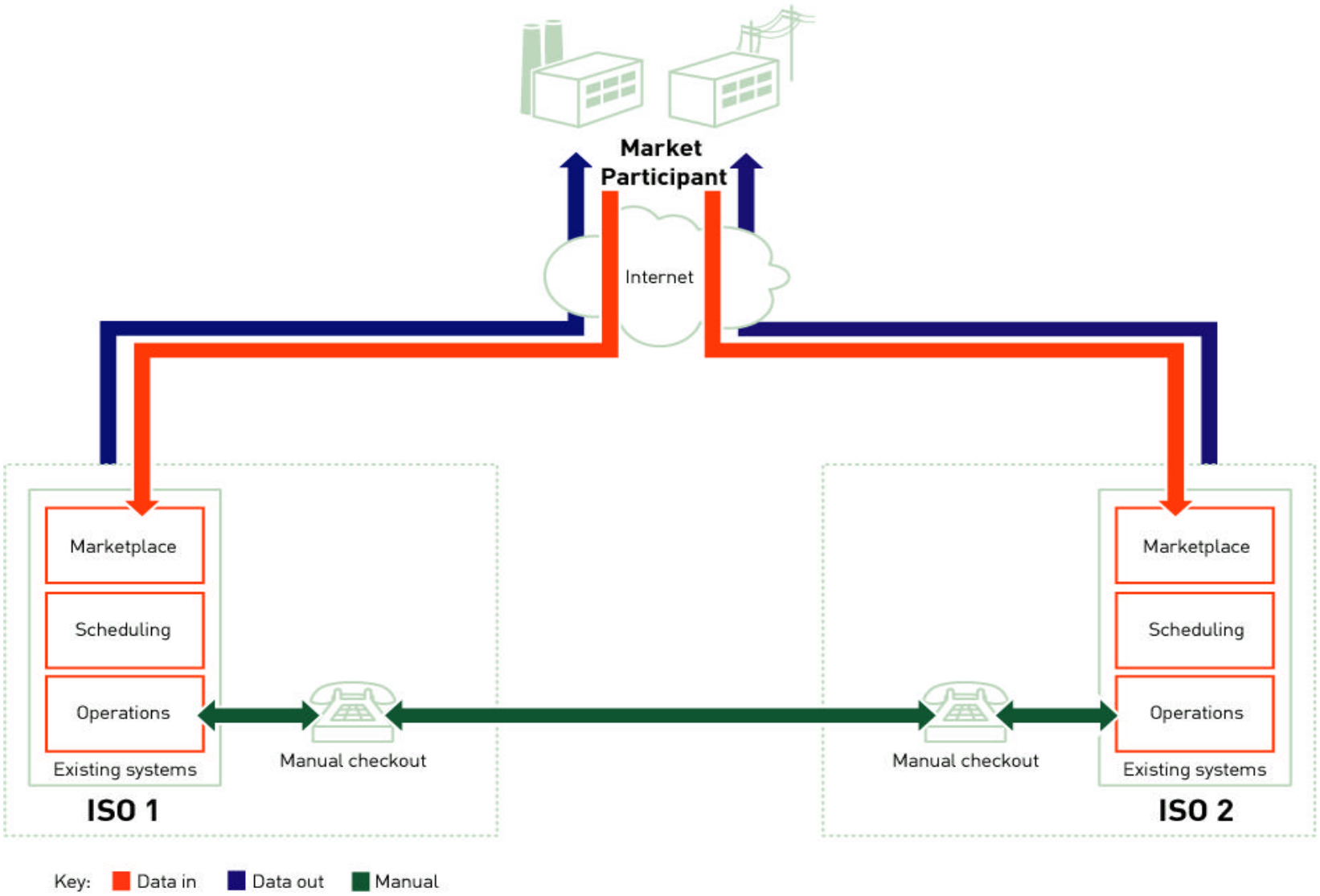
What is OSS?

- OSS is comprised of an industry leading set of tools for Market Participants and ISOs/RTOs to interact, trade and communicate within and across Control Areas

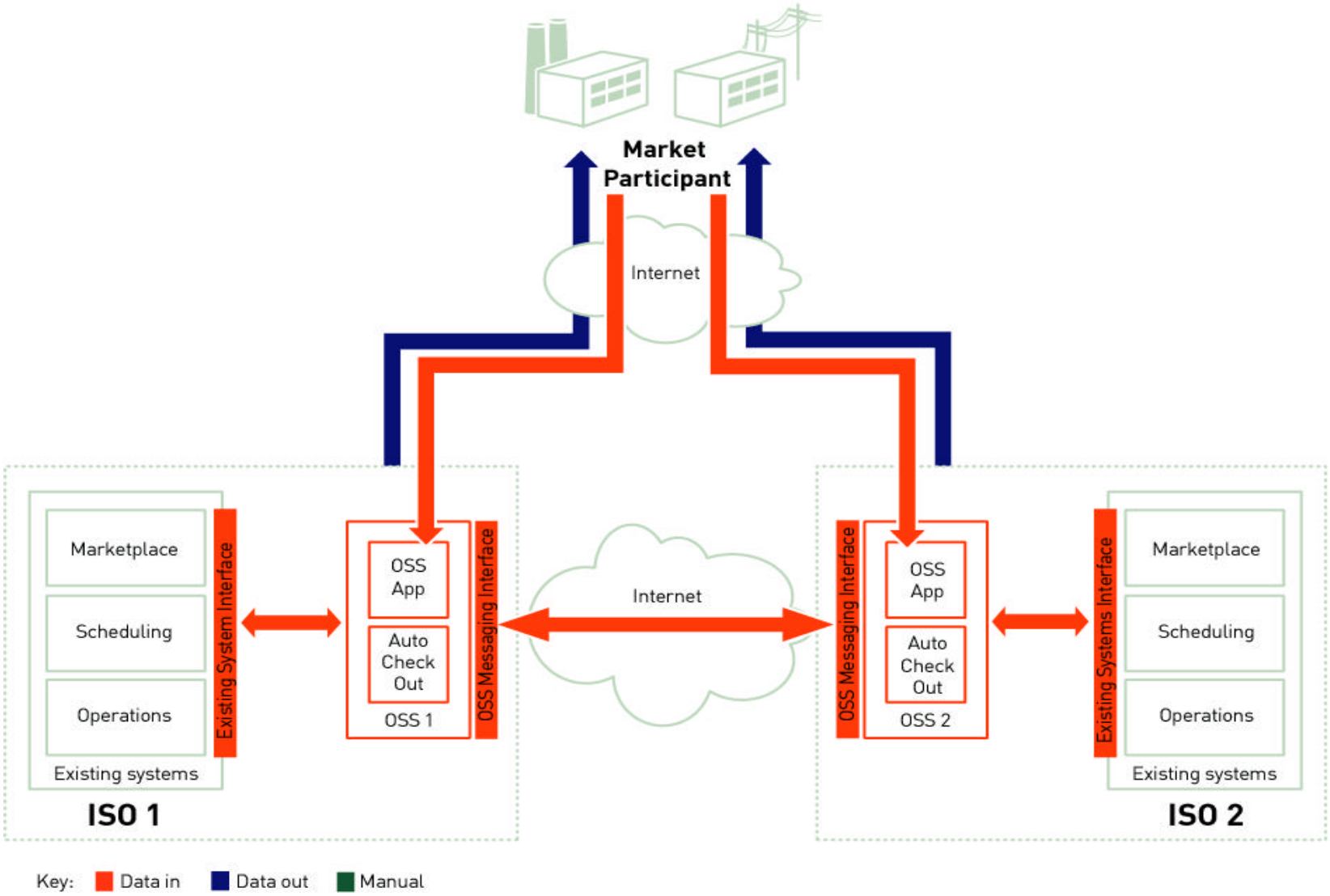
- Initially, OSS will provide the ability to:
  - Enter bilateral transaction bids across ISO/RTO borders with a single data entry interface
  - View status from each ISO/RTO
  - View schedules from each ISO/RTO
  - Request transmission and ramp reservations

- Northeast Energy Portal
  - First implementation of OSS architecture at NYISO can evolve to a scheduling portal for all markets in the Northeast

Current Process



OSS Conceptual Model



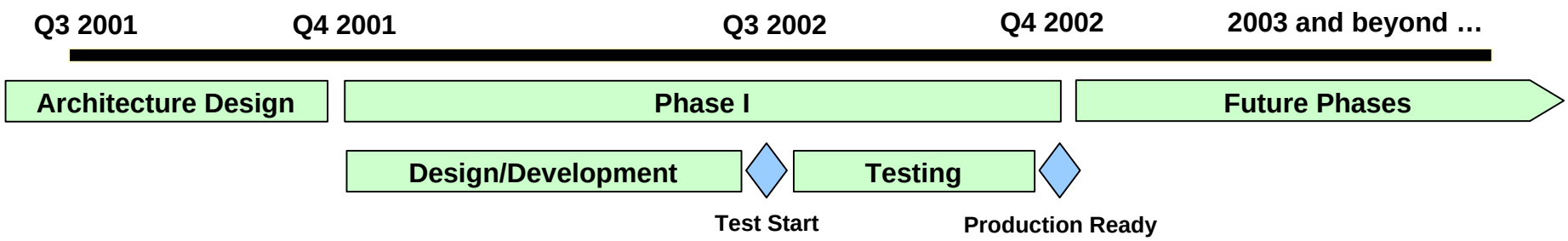
Technical Benefits of OSS Architecture

- Open, scalable, and robust architecture
  - XML Messaging standard designed
  - Designed for easy adoption by other ISO/RTO
  - Leverages open, enterprise class technologies
  - Aligned with FERC Order 2000 concerning open architectures
  - Easily accommodate FERC SMD
- Leverages existing investments
  - Designed to interact with marketplace application of any ISO/RTO while providing an integrated platform for inter-Control Area transactions
- Allows ISO/RTO to tailor interface for their customers

Benefits to the Market

- Data consistency across ISOs / RTOs
- Single point of entry
- Node-to-node model accommodates different market models, including business process, timing, ramp rate, etc.
- More efficient inter-control area checkout processes

Project Timeline



Architecture Design	Phase I	Future Phases
■ Agreement on OSS end-vision ■ Validation of pilot concepts ■ Open nodal architecture	■ Internal / external bilateral transactions (hourly) ■ Pre-scheduling ■ Integration with PJM ■ Ability to review and manage schedule status ■ Ability to edit NERC tags ■ Bid entry up to 18 months in future ■ Support Eastern Time only ■ Automatic queuing	■ Integration with ISO-NE & IMO ■ Integration with e-Tag agents ■ Support of sub-hour transactions ■ Integration w/ WebCoordinate ■ Consistent w/ ESC and OASIS II ■ Automated Checkout ■ Inter-regional congestion commitments ■ Integration with more ISO / RTO ■ User defined time zone

In Summary

- Open, platform independent design that is consistent with FERC Order 2000
- OSS is an application that can be easily adopted by other ISOs/RTOs with minimal change to existing systems
- Addresses critical Inter-Control Area transaction seams issues with minimal impact on current MP processes
- Based on requirements gathered from MPs with input from ISO/RTO
- Defines a communication protocol between ISOs/RTOs

Questions …