

NCOIC Rapid Response Capability (NRRC)

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□□□Ĩ□"...at a Glance

- Global organization focused on industry neutral concepts for NCO adoption and interoperability
- 10-year legacy of addressing global cross-domain interoperability issues and concepts
- Lexicon, tools, processes and resources for building interoperable systems across multiple marketplaces
- 55+ members and affiliates representing
 12 countries

NCOIC's Advisory Council and its many external relationships ensure a focus on customer needs

Joint, Interagency, Civilian, Government and Defense



Members are Global Leaders

Academic institutions

Air traffic management providers

Service providers
Consulting, Engineering, Logistics

Defense suppliers
All military services / Multinational

Government agencies
Includes FFRDC and SETA

Non-government agencies
International organizations

Human service agencies

System integrators

Commercial systems, Defense systems

IT firms

Communications, Data management, Human-Machine interface, Information assurance

Standards organizations

The Challenge...

The National Geospatial-Intelligence Agency needs to provide Geospatial data to non-traditional customers.

NGA aligned to meet traditional customers; non-traditional customers erratically served:

NGOs in a disaster environment

NATO operations

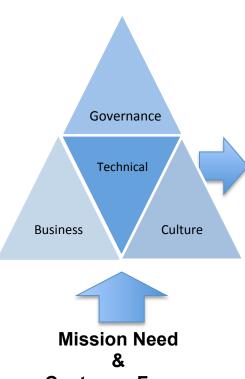
Requested NCOIC assistance

...working with the National Geospatial-Intelligence Agency

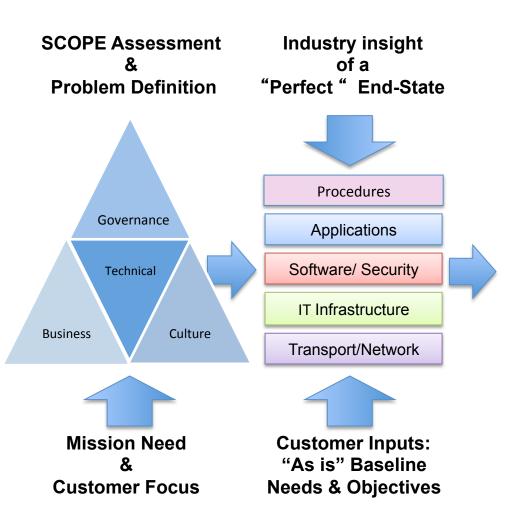
NCOIC was asked to consider "how to ..."

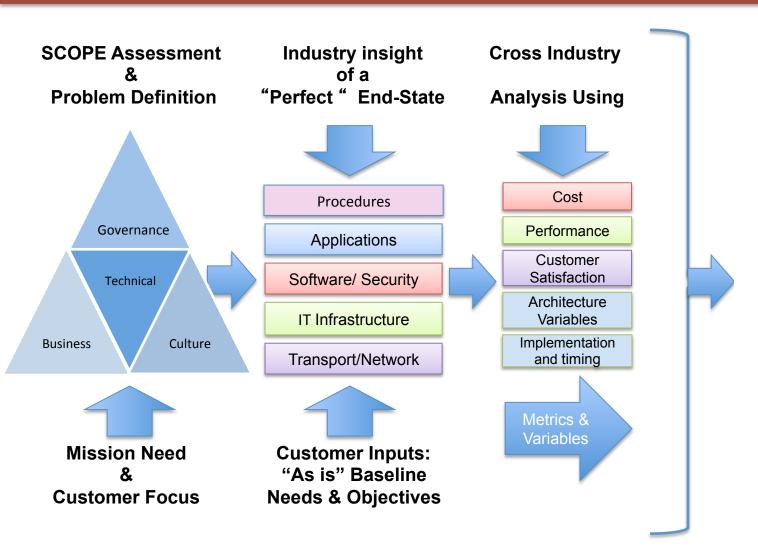
- ...leverage industry best practices
- ...protect digital geospatial data
- ...manage a bandwidth challenged environment
- ...ensure geospatial data consistency, interoperability and mobility
- ...enable international collaboration
- ...facilitate backward compatibility

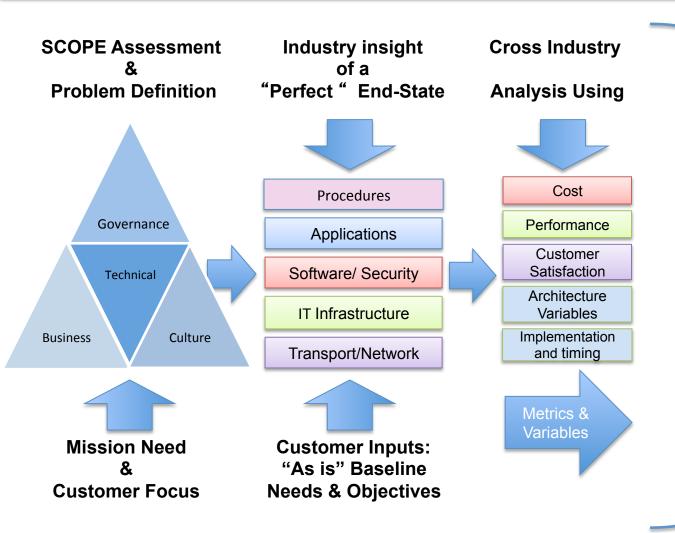




Customer Focus







Recommended "To-Be" End-State

Lower Cost

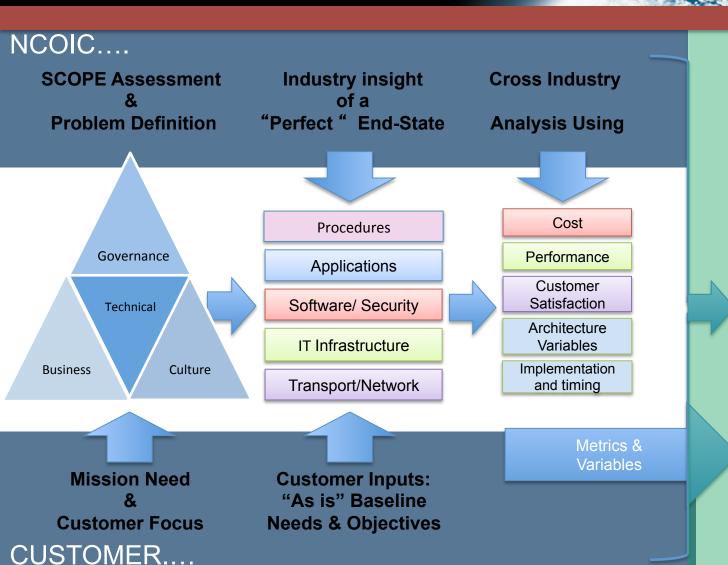
Higher Performance

Increased
Customer Satisfaction

Efficient & Effective Architecture

Timely Implementation

Project Report
with Roadmap



Recommended "To-Be" End-State

Lower Cost

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Project Report with Roadmap

Voice of Industry Review

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The NGA Use Case Summary....



- net-centricity
- cloud computing
- large scale integration of applications
- geographically dispersed
- from various industries
- not product specific*
 - * products have to fit the mission, not the other way around...

NCOIC Approach for NGA



- Is fast
- Is Secure
- Integrates all information providers and users
- Enables different cultures policies and concepts

Deliver Final Report that:

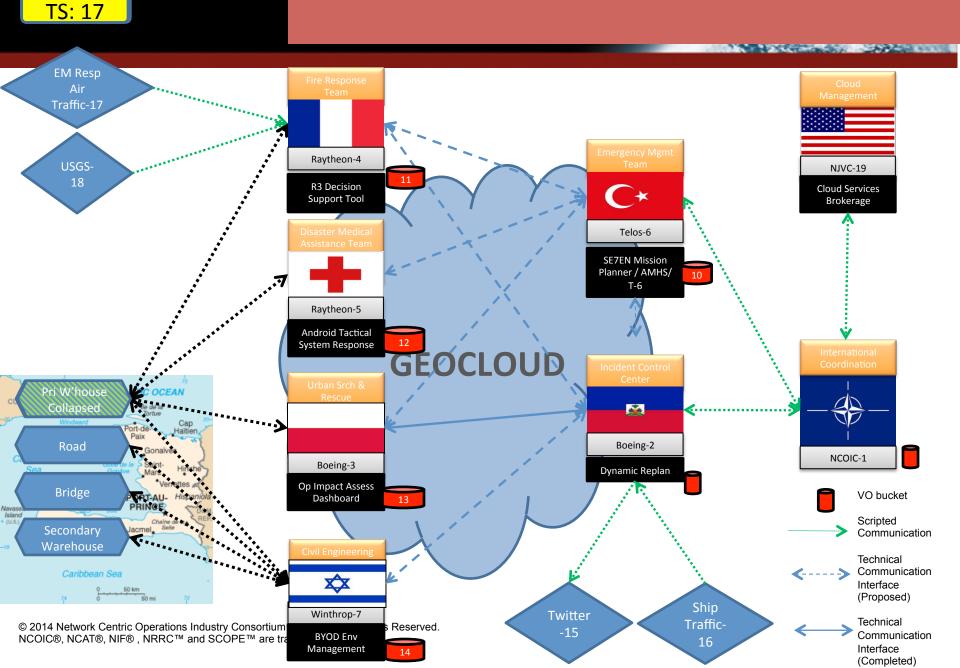
- Highlights use of available technology
- Identifies gaps
- Provides 'how to' integrate multiple policies

A major earthquake occurs in Haiti.



Time stamps

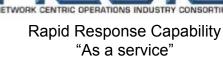
Situation stabilized. Supplies arrive at Secondary Warehouse.



NGA GCC Concept Demo



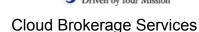




Contract oversight
Communications
Staff Support
Contract Admin
SOW & Cost Estimates



Program Management Operations, Schedule, Budget





Google OpenStack

GeoSpatial Data

ID & Access

Amazon Web Services

Operational Cloud Services



Program Management



- Virtual Operations
- Federated ID Sys



- Geoserver Pooling
- · Cmd Dashboard Templates
- Tactical Re-Planner



- Msg Handling Svc;
- SE7EN Tactical Planning
- TSDAS



Open Standards

Raytheon

- Strategic R3 Planner
- Advance d Tactical System



BYOD Special apps

NCOIC provides Non-Advocate Perspective -- Focused on Cross-Domain Interoperability

Cycle 1 developed the Cloud Infrastructure

Expert User

Geospatial Community
Cloud

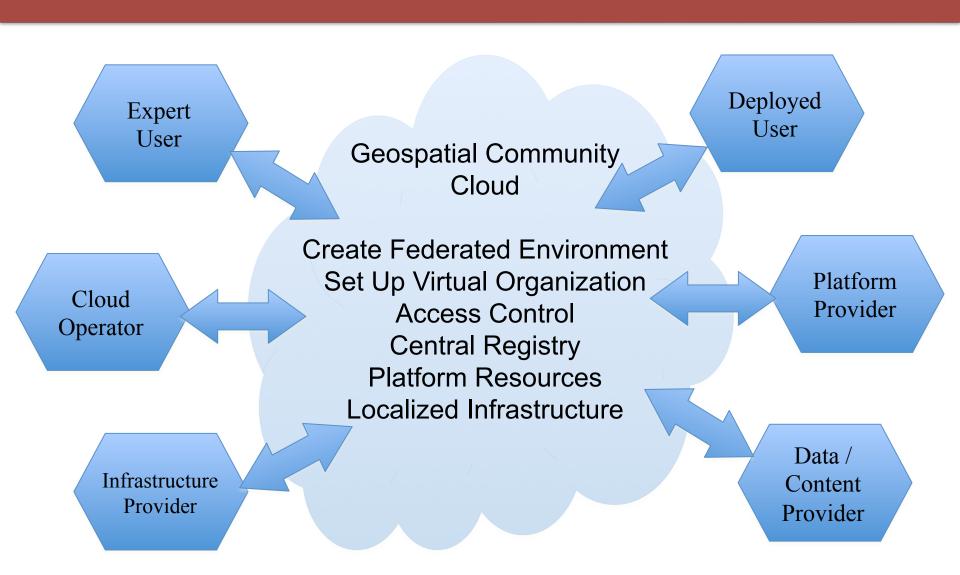
Deployed User

Cloud Operator Create Federated Environment
Set Up Virtual Organization
Access Control
Central Registry
Platform Resources
Localized Infrastructure

Platform Provider

Infrastructure Provider Data /
Content
Provider

Cycle 2 plugged in the Applications and Data



The NCOIC Rapid Response Capability (NRRC) is...

- ...an architecture and implementation process plan
- ...a process to rapidly stand up an infrastructure
- ...an enabler for Information Users and Providers to rapidly integrate information systems
- ...a methodology to secure, share and manage information exchange
 - between disparate entities
 - operating across multiple domains.

NCOIC Rapid Response Capability

NRRC process

- Enables rapid development of a Federated Cloud System
- Plugs in App and Data providers
- Supports entire operations
- Caveats as desired

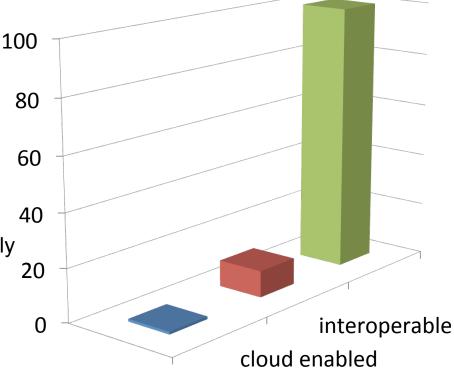
The App Providers create capability

- If not cloud enabled, assume factor 1
- Cloud Enabled = 10
- Interoperable with other app providers = 100

Data Providers

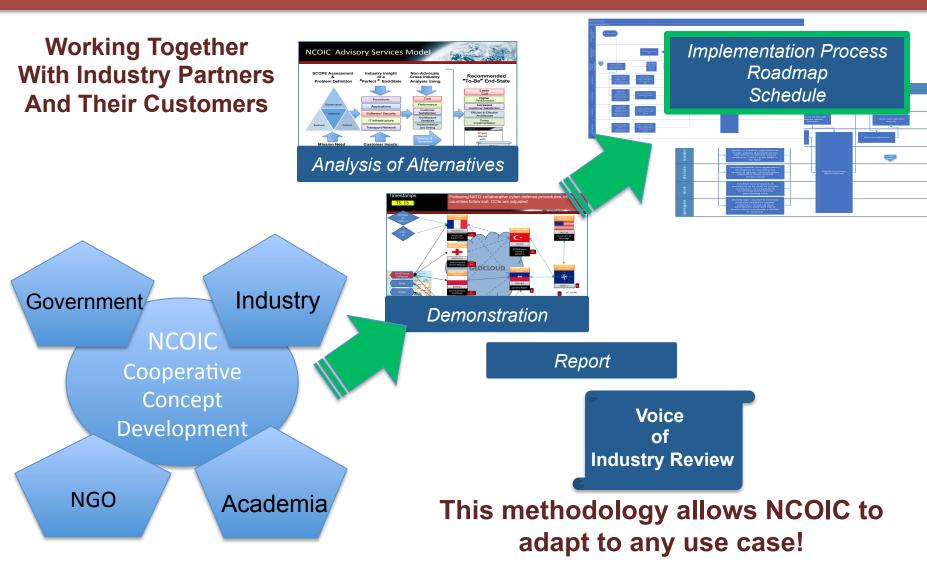
- Enable cloud participants to access data globally
- Update data and increase data value

capability factor



not cloud enabled

Open Cooperative Development Environment



Summary

- The NCOIC member activity built interoperable tools and patterns
 - NRRC is available and now supports Rapid Response
- NCOIC contract activity provides unique interoperable solutions
 - solutions, not found in industry or government
- All are open, and all are non proprietary!



Network Centric Operations Industry Consortium

THANK YOU for your attention! www.ncoic.org