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IDC Re-engineering Phase 3

Development Planning Discussion

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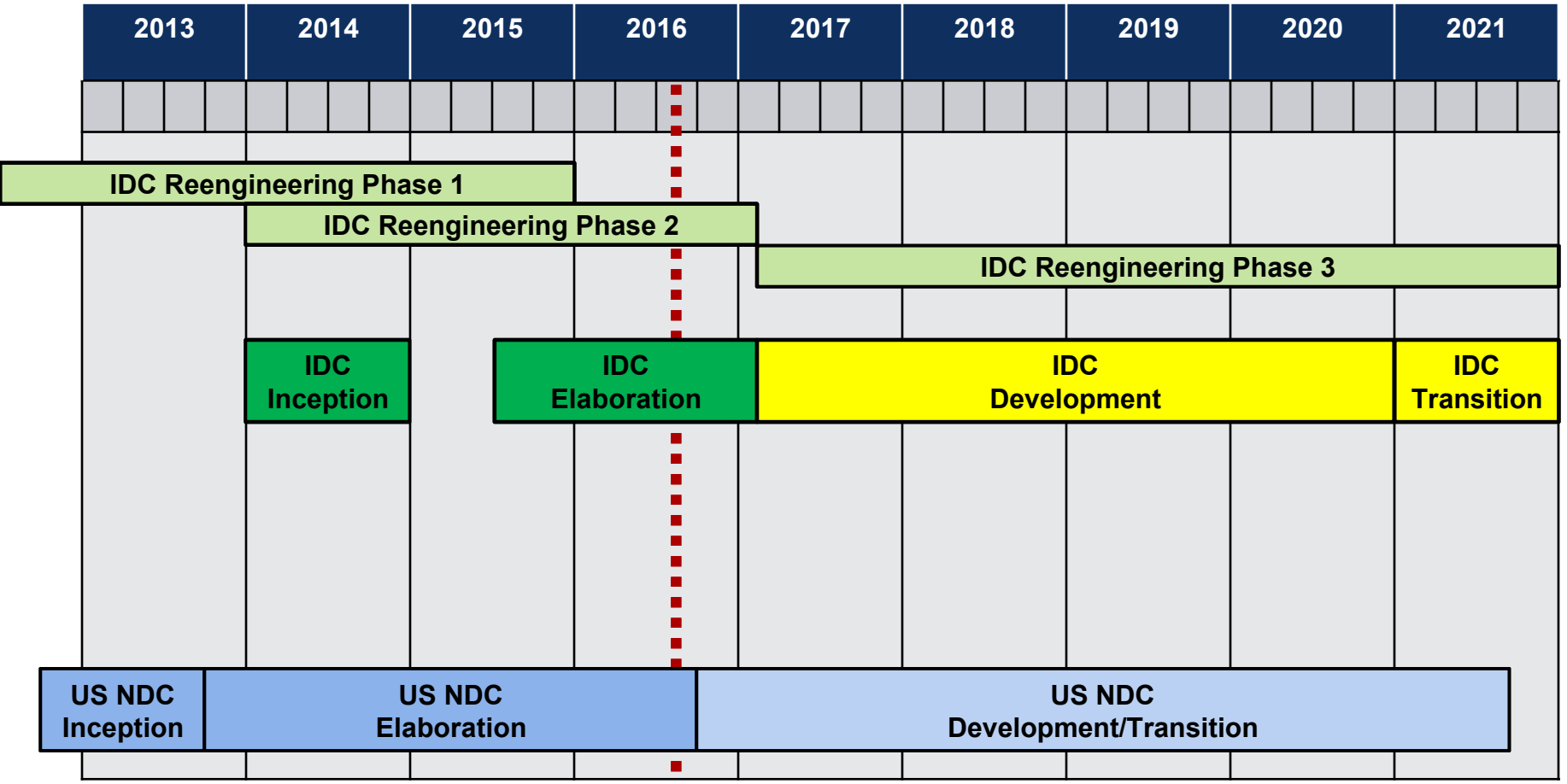
IDC Re-engineering Timeline



IDC Development is currently unfunded

IDC Re-engineering Phase 3

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- Development of a new IDC processing system
  - Based on a new software architecture providing SRD-level requirements and Non-Functional Requirements
  - Extensible
  - Flexible
  - Maintainable
  - Shareable
  - Etc.

Leveraging US NDC Modernization

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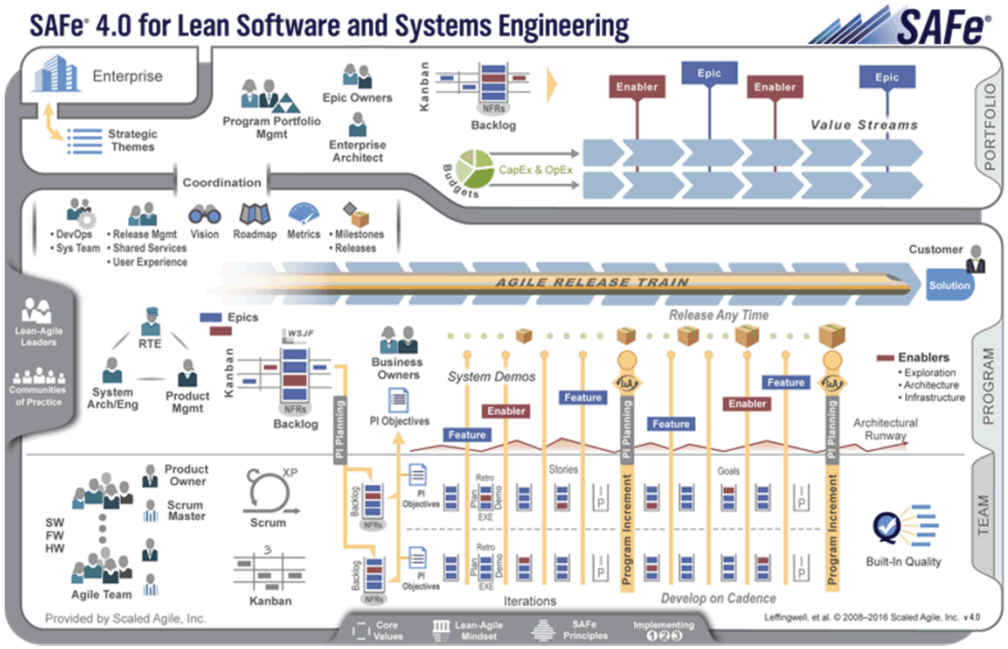
- IDC RP2 project is supported by US Contribution-in-Kind performed by Sandia National Laboratories (SNL)

- IDC RP2 is currently leveraging US NDC Modernization effort – SNL staff, processes, and other resources to realize cost savings
  - The two systems overlap substantially in required capabilities, and have historically shared a common system design
  - The modernization goals of both systems can be achieved at lower cost through development of a shared core architecture

- US NDC Modernization Development Project is currently being planned
- Proposal is for IDC RP3 to leverage US NDC Modernization Development Project for the core system architecture and major common components
  - US effort will accommodate common requirements with IDC

SAFe

- Sandia software projects including US NDC Modernization are adopting an Agile process called SAFe
  - Scaled Agile Framework
- Proven methodology
  - Scrum-focused
- Scalable
- Customizable
- Integrates well under RUP
  - RUP analysis and design artifacts are used to scope development
- Training and consulting help are available



Development Discussion Topics

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- IDC Expectations, Constraints, etc
  - Member state contributions – delivery to IDC, acceptance, etc
  - IDC collaboration with member states
  - International participation in Re-engineering
  - IDC development capacity (in-house and contract)
- Other CTBTO Issues
  - Maintenance & Operations
  - Training
- International Engagement
  - What does buy-in look like from states parties
  - Specific steps
  - What barriers are anticipated
- Anticipated timeline for system development
  - Development, delivery, transition, etc.

Development Discussion Topics (2)

- Who does the work?
- Who leads the effort?
- May vary by system element

- Potential RP3 performance options
  - US Government CiK (SNL, etc)
  - IDC in-house
  - IDC contract
  - Other Member State contributions

System Development Elements

- Program/Project Management
  - Manage Core System development
  - Socialize IDC Re-engineering program
  - Manage member state contributions
- Software Development
  - Development of core System
  - Development of IDC unique components
  - Development of unsolicited NDC contributions or alternate IDC components
  - Integration of additional components
- Deployment
  - Build & operate Testbed
  - Deployment of core System architecture
  - Build Operational System
  - Transition to Operational System
- System Engineering
  - Requirements Tracking
  - Verification and validation testing
  - Acceptance testing
  - Documentation, Training, etc
  - Socialize alternate NDC-in-a-Box

Program Management

- Socialize IDC Re-engineering program
- Manage member state contributions

Software Development

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- Development of core System
  - US Government CiK / SNL
- Development of IDC unique components
  - US Government CiK / SNL
  - IDC in-house
  - IDC contract
  - Member State contributions
- Development of unsolicited NDC contributions or alternate IDC components
  - Member State contributions
- Integration of additional components
  - IDC in-house
  - IDC contract
  - US Government CiK / SNL

Deployment

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- Build & operate Testbed
- Deployment of core System architecture
- Build Operational System
- Transition to Operational System

System Engineering

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- Requirements Tracking
- Verification and validation testing
- Acceptance testing
- Documentation
- Training
- Socialize alternate NDC-in-a-Box