



# **The Quality of Installation Geospatial Information and Services (IGI&S)**

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# Agenda

Acquisition, Technology and Logistics

- IGI&S Data Quality Challenges
  - Common Installation Picture
  - Community Feedback
- Data Quality Goals
- Interim Solutions for Data Quality
  - Prioritizing quality items
- IGI&S Data Quality Tools
  - SDSFIE-M Metadata Style for ArcGIS
  - Data Reviewer RBJs
  - DCSs
  - SDSFIE Online Tools
- SDSFIE Status Report



# IGI&S Data Quality Challenges

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- Top Challenge: Fundamental quality criteria
- Example: Common Installation Picture
  - Community Feedback from HIFLD and WebEOC
  - Common Concerns
    - o **Inconsistency** of data population (e.g. Entire installations that are missing data)
    - o **Inconsistency** of data attribution
    - o HIFLD, WebEOC, Alert and E911 all have a requirement for complete and accurate population and attribution of:
      - Roads
      - Buildings
      - Sites



# FY16 CIP Data Call – SITREP

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## Deliverables Received

Component	CIP Data	Metadata	Certification Letter	Site Reconciliation
USA	✓	✓	✓	X
ARNG	✓	✓	✓	X
USAF	Recertified FY2015 Data	Recertified FY2015 Data	✓	✓
USMC	✓	✓	✓	X
USN	✓	✓	✓	✓
WHS	✓	X	✓	X

“Site Reconciliation” spreadsheets not completed by most Components

## Initial Data Quality Observations

- Improved Real Property attribution (RPSUIDs, RPUIDs)
- FY15 data quality issues remain:
  - Duplicate features
  - Excess features (e.g. roads)
- Improvements are required for FY17



# Goals for IGI&S Data Quality

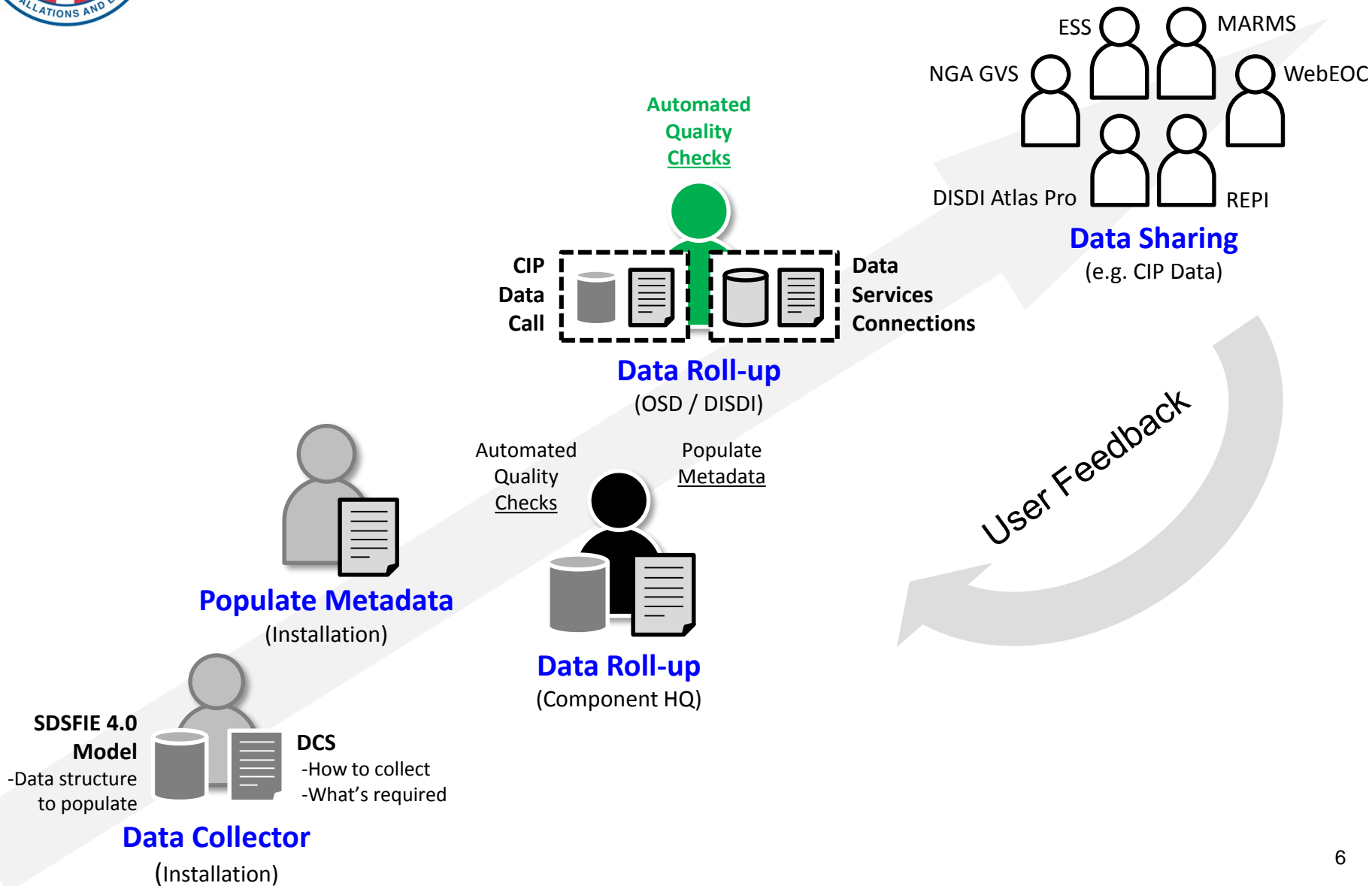
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- **Standardization = Interoperability, Understandability**
  - Data must adhere to applicable SDSFIE parts
- **Trustworthiness**
  - Completed metadata with quality elements populated
- **Visible, Accessible**
  - Net-centric connections (where possible)
  - Metadata catalogs linked to DISDI Portal (Voyager)



# Lifecycle of High Quality IGI&S Data

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# Data Quality Interim Solutions

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- Focus on data quality of CIP Layers for FY17
- Prioritizing Data Quality Items and Metrics
  - CIP Data Quality Checklist
    - o FY15 and FY16
      - Components received a summary of data quality observations as a tool for future CIP submissions
      - Only a “site reconciliation” check was required for FY16 CIP data call
    - o FY17
      - Components required to self-report on 14 high priority data quality issues
      - Quality priorities include:
        - » Provide all deliverables
        - » Remove duplicate features
        - » Remove “excess” features
        - » Populate RPSUIDs and RPUIDs, check validity of values
        - » Fix invalid geometry issues
      - **On request, DISDI can provide a Data Reviewer batch job to check “High Priority” Items prior to submitting to OSD**



# IGI&S Data Quality Tools

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- **Data Content Specifications (DCSs)**
  - Describe how to collect data and populate metadata
- **ArcGIS Data Reviewer - Run Batch Jobs (RBJs)**
  - Check the data for specific errors
- **SDSFIE-M Metadata Style and SDSFIE Online Tools**
  - Assist with metadata population and standardization





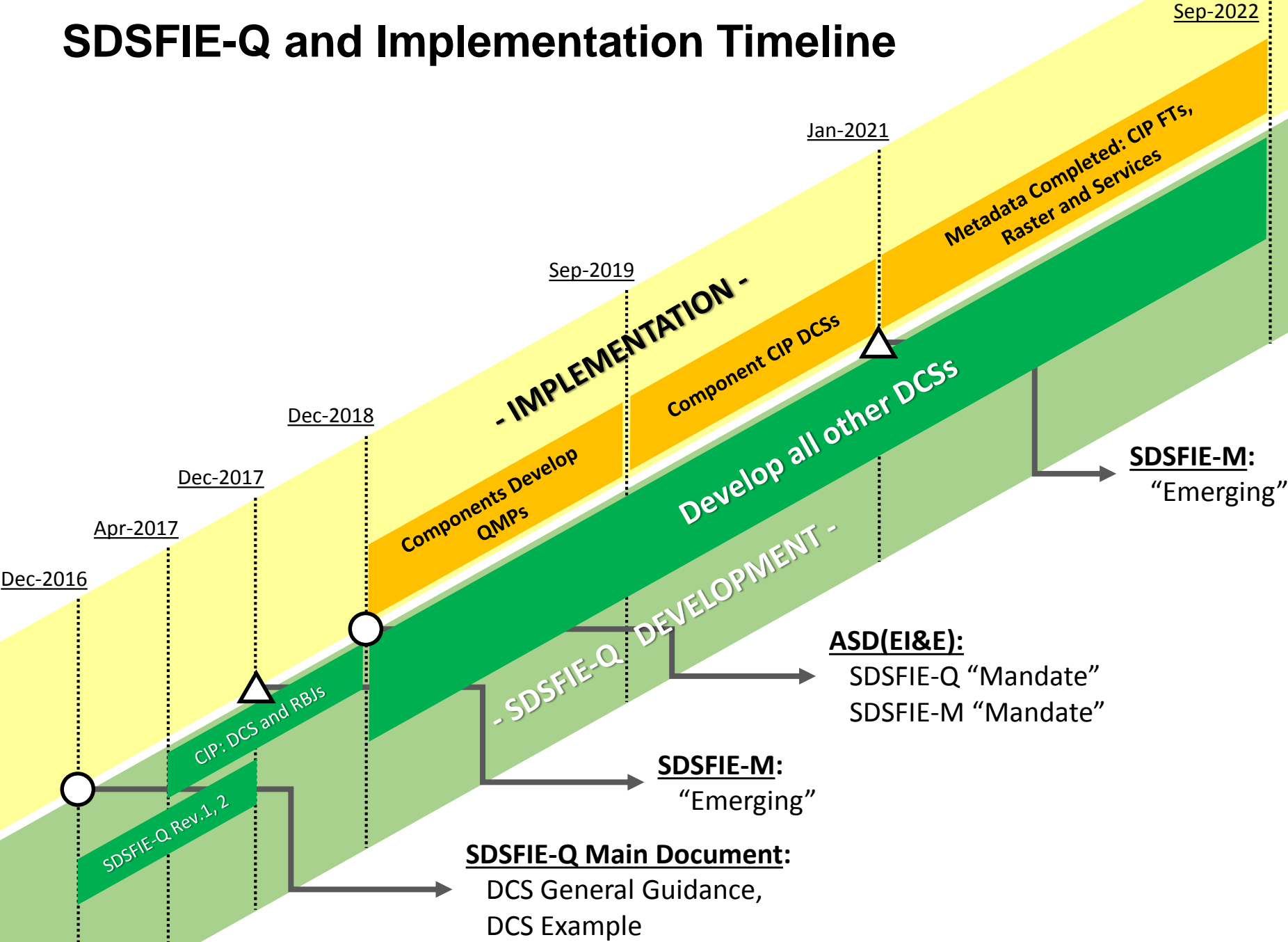
# SDSFIE-Q – Status

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- SDSFIE-Q **Approved**
  - IGG accepted the final draft of SDSFIE-Q and supporting documents
    - o Annex A: DCS General Guidance
    - o Annex B: DCS Example (Military Range))
  - IGG has not recommended “mandated” status yet
- Next Steps:
  - Draft Revision 1, SDSFIE-Q to complete Raster Data Quality Section (aligns with SDSFIE-R use case requirements)
  - Create Data Content Specifications (DCS): The DISDI Program identified 11 CIP layers (below) to complete in 2017

Group 1 (DRAFT in review)	Group 2	Group 3
MilitaryRange MilitaryTrainingLocation ImpactArea	Building Fence Tower AccessControl GolfCourse	Site Installation LandParcel Outgrant

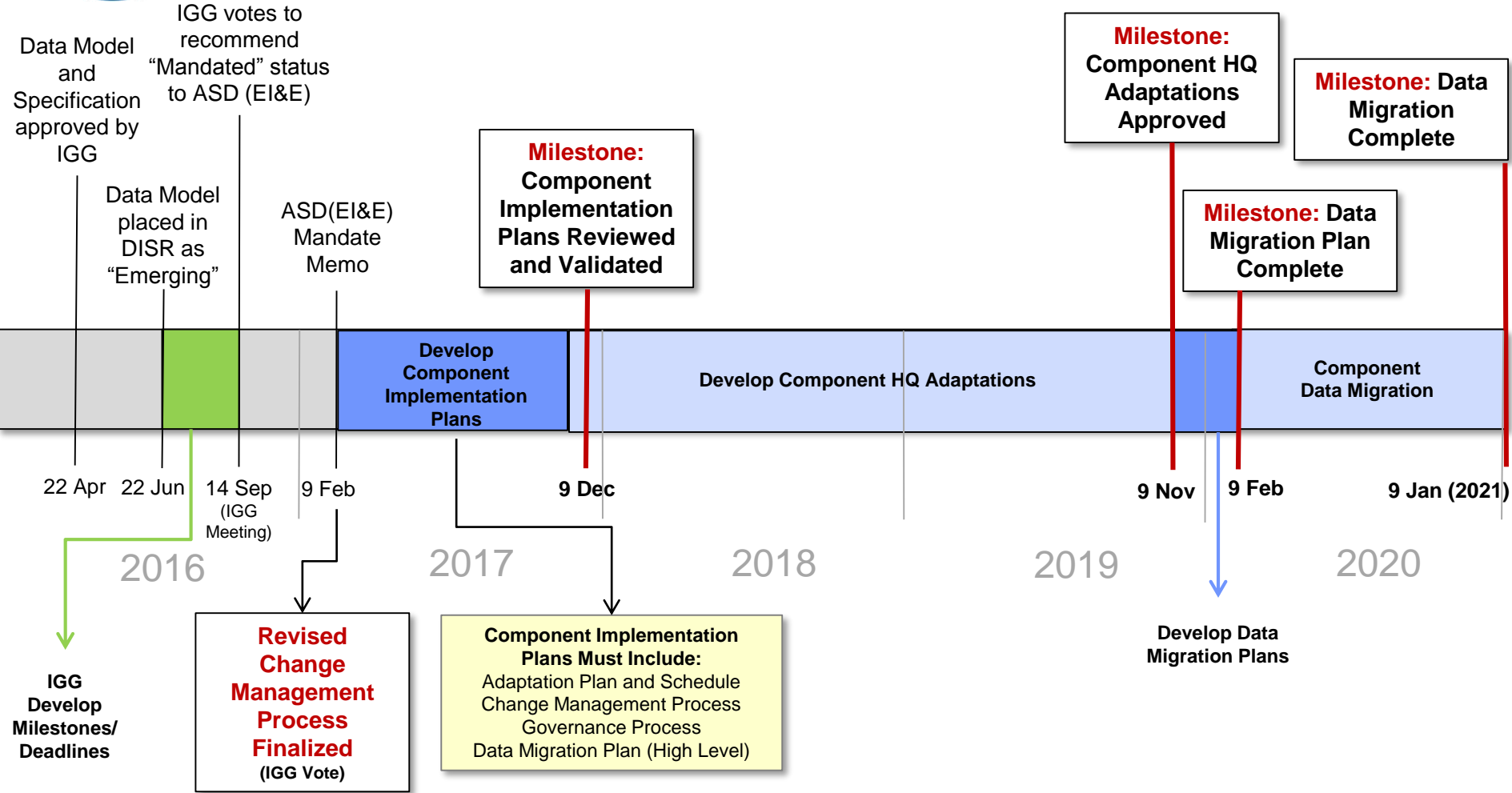
# SDSFIE-Q and Implementation Timeline





# SDSFIE-V 4.0 Implementation Milestones

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# The SDSFIE Family of Standards

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The Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) are now a family of IT standards for IGI&S.

Vector



Metadata

Raster



Quality

Services



Endorsed

Portrayal



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# Questions?

