



GOES Data Collection System (DCS)

Technical Day

National Environmental Satellite,
Data, and Information Service

April 30th, 2025

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Manager

Contractor Dev

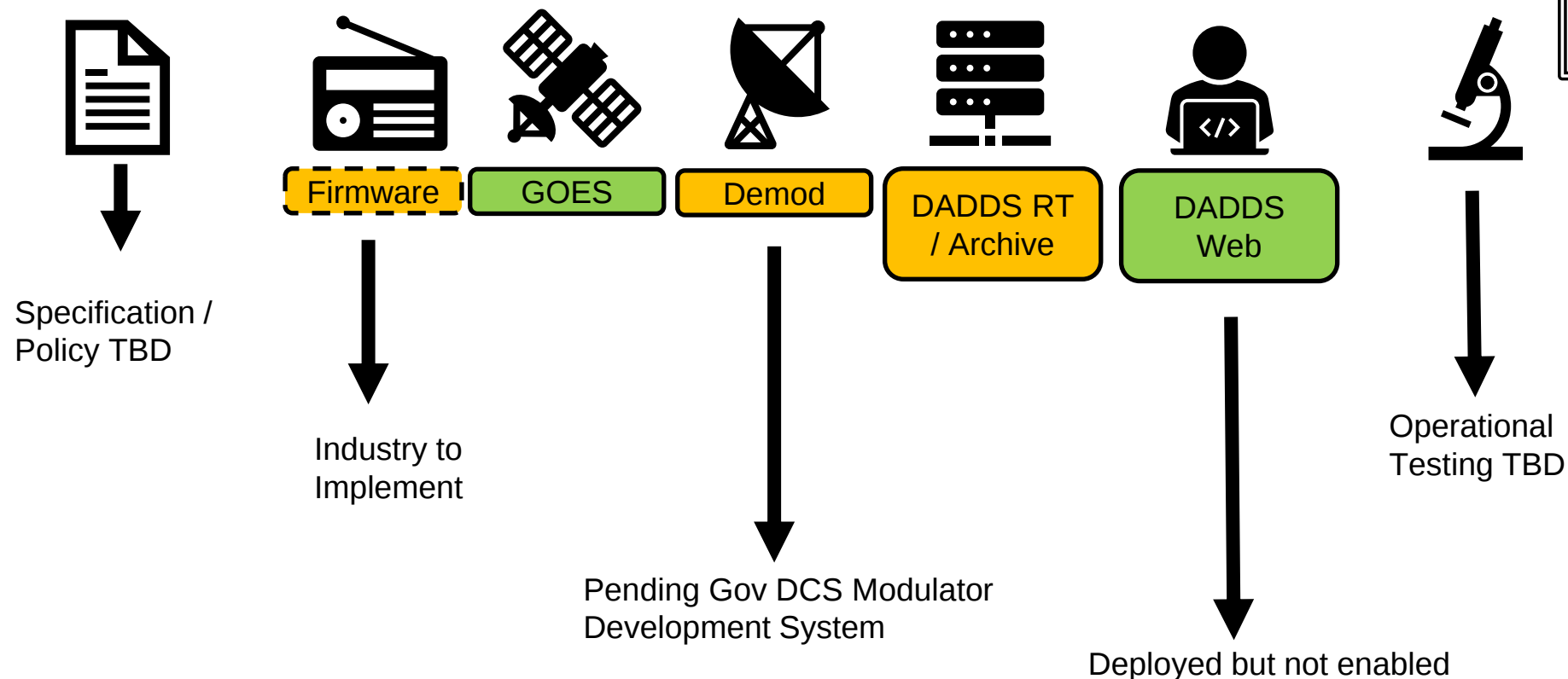
Gov Dev

Deployed /
Production

Communication Protocols – Latitude / Longitude Reporting

Pending

- ❖ IT Security and Software Deployment
- ❖ Demodulator Development System

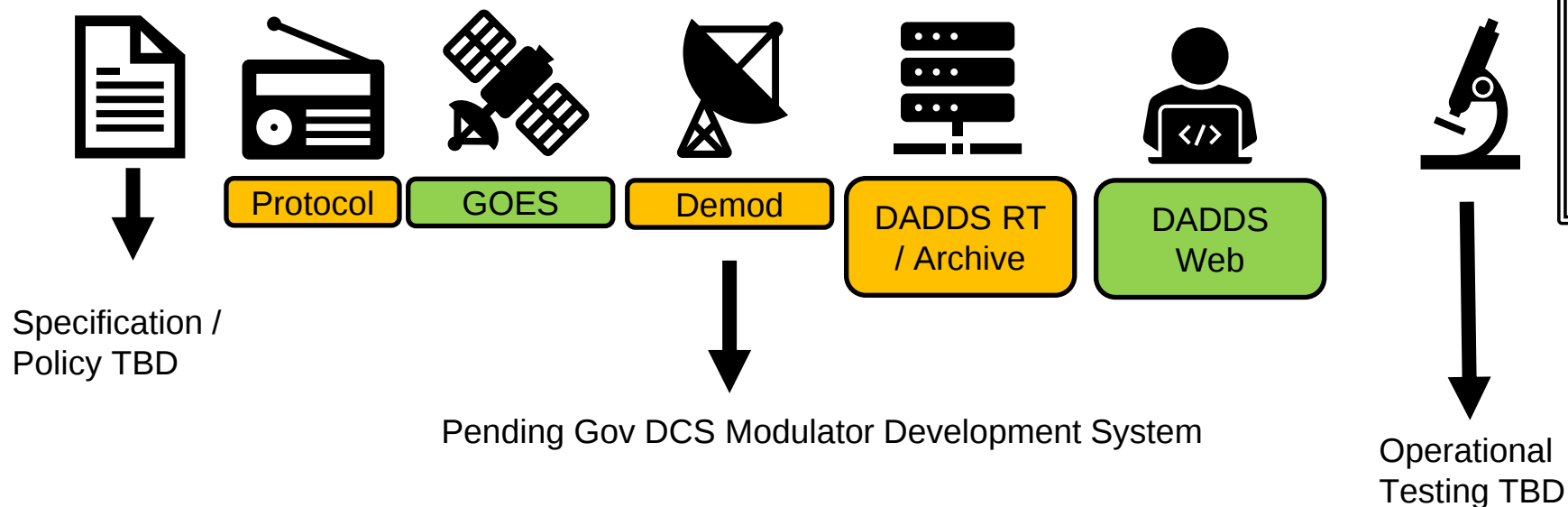


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Production

Communication Protocols – Binary & Compacted ASCII & PB



Pending

- ❖ IT Security and Software Deployment
- ❖ Demodulator Development System
- ❖ External Interface Testing
- ❖ Finalized Spec

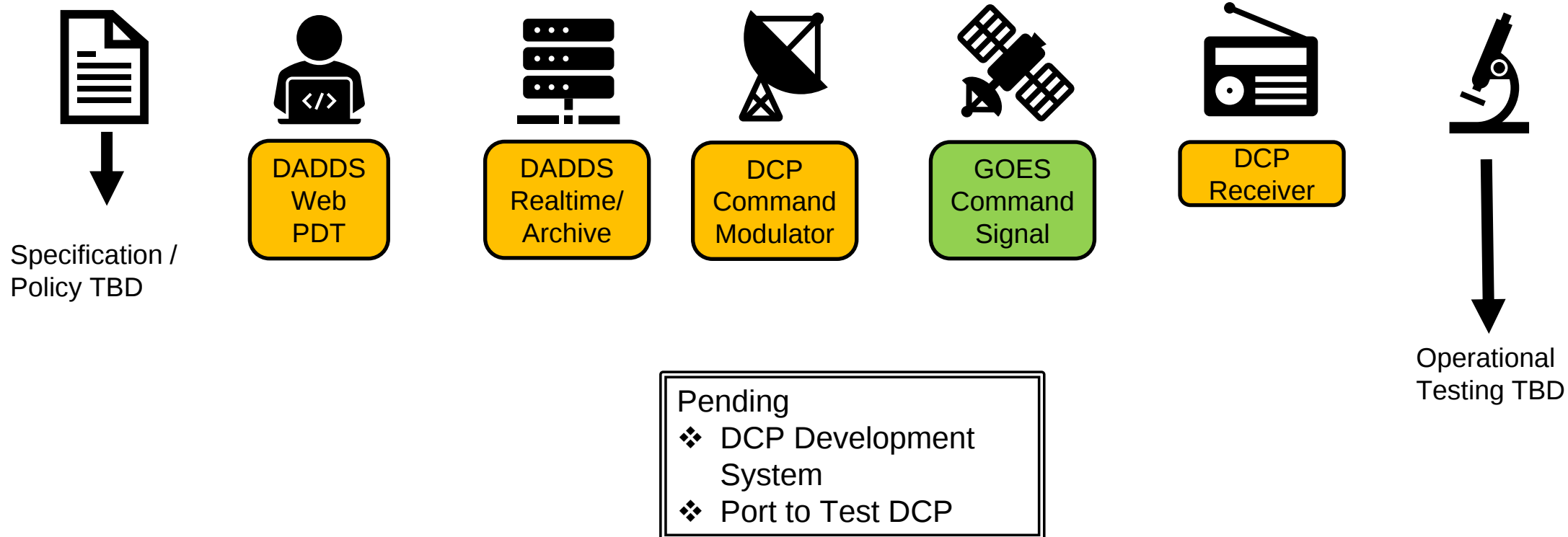


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Production

Communication Protocols – Enhanced DCP





Communication Protocols - Evaluation

Protocol	Comments	Benefit	Impact
Compacting ASCII & Pseudo binary	• Simplest way to reduce message size • “IT Transparent” in distribution via NOAA	Reduced Message length or increased data	DCP firmware update
Full Binary	• Part of DCP Command Implementation & Command Acknowledgement	• Reduced message size • Improved Error Correction	Not human readable, user decoding needed
Enhanced DCP Protocol	Recommended from in-depth study focused on most robust communication method (e.g. buoys)	• 400/800 bps in same bandwidth • More robust • Improved Error Correction • Standardize w/ international partners	DCP firmware update

Prove through testing

