



NOAA/National Weather Service

The NWS Field Requirements Process:

Capabilities and Requirements Decision Support (CaRDS)

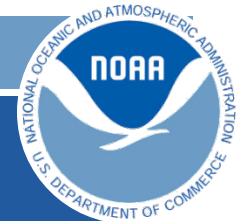
for Requirements Vetting and Validation in Portfolio-based Governance

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V1.3

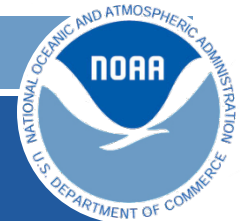


Bottom Line – Up Front

CaRDS ≠ OSIP

CaRDS is designed to be:

- Lighter – less systems engineering process & paperwork
- Inclusive – accessible by anyone (no more H-OSIP!)
- Transparent - ability to show request status
- Responsive – letting staff know if a request has been accepted, and if not, to provide a detailed explanation
- Strategic – linked to strategic goals and AOP process
- Fiscally Linked – aligned with resources early in the process
- Accountable – requirements validated by the new Mission Delivery Council (MDC), as part of NWS Governance
- Integrated – deliberate coordination between MDC and PIC



It all starts with a “Request”

Request – a generic term for any of the following:

“Need”

“Request”

“Idea”

“Opportunity”

For purposes of this presentation, any such input will be referred to as a **“Request”** until validated as a **Requirement** via the new governance process.

Request Originator – The person or entity initiating a Request.

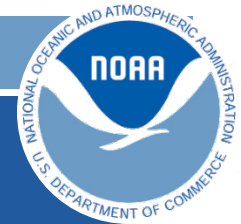
The Originator may be *Internal* (NWS), or *External* (Executive / Legislative Branch, International, Partner, other organization or agency). Originators are expected to follow their requests through the CaRDS process as an SME.

As appropriate, external originators present their requests via their NWS contact.

External examples: FAA via inter agency agreement or Aviation Service Program.

Emergency Manager or National Media Enterprise via Partners Meeting or other venue.

Science Advisory Board / EISWG.



When does a Request become a Requirement?

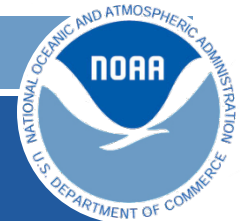
Validated Field Requirement – A Request which:

1. Is validated by the **Mission Delivery Council (MDC)** – meets at least once per month
2. Is **appropriate and applicable to the organization** - within the NWS Mission or strategic documents such as WRN Roadmap, Strategic Plan, AA Phasing Diagram, NAS/NAPA Reports, etc.
3. **Provides Benefit** - ‘corporately’ determined to be sufficiently important, necessary, or of high benefit such that investing resources (FTE, dollars, or changing a process) is justified in implementing the request.

Note 1: Any validated field requirement that would cause a change in or introduce a new product or service must work through **Directive 10-102**, “New or Enhanced Products and Services”. CaRDS replaces the Cross Agency Review Team (CART) process and Product Evaluation Team (PET), and any other legacy field requirements process.

Note 2: The **Operations Proving Ground (OPG)** will be utilized, as appropriate, to test innovations before being deployed into an operational environment.

Note 3: Service Program Teams (SPTs) shall include representatives from **all appropriate field units**.



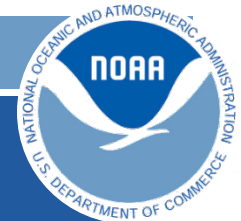
How do we rank or prioritize a Request?

Ranking Criteria for Requests

1. Laws/Executive Orders & Compliance with Policy Guidance
2. Compliance with Federal and International Agreements
3. Mission Enhancement and/or Improvement
 - a) New Product, Service or Tool (Transformational)
 - b) New Product, Service or Tool (non-Transformational)
 - c) Other

Ranking 1 & 2 are treated as mandates into the CaRDS process

Ranking 3 will encompass most of the requests that are submitted into the CaRDS process. 3a and 3b capture any new product, service or tool request, but categorized by whether the activity is considered to be transformational. 3c is used to capture any other enhancement.



A Quick look at the new Councils

Executive Council

Chair: AA

- Provides NWS strategic direction
- Approves NWS planning and budgeting documents
- Serves as decision maker for high impact, high visibility issues including NWS transformational changes

Mission Delivery Council

Chair: COO

- Transparently validates and prioritizes Field mission requirements
- Discusses and approves operational and service policies to ensure successful and consistent mission operations

Portfolio Integration Council

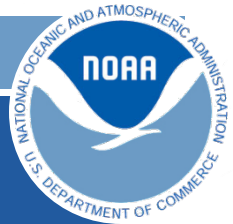
Chair: OPPSD Director

- Ensures cross-Portfolio integration to support needs of mission execution
- Integrates the “left side” under OPPSD with the “right side” under COO

Enterprise Risk Council

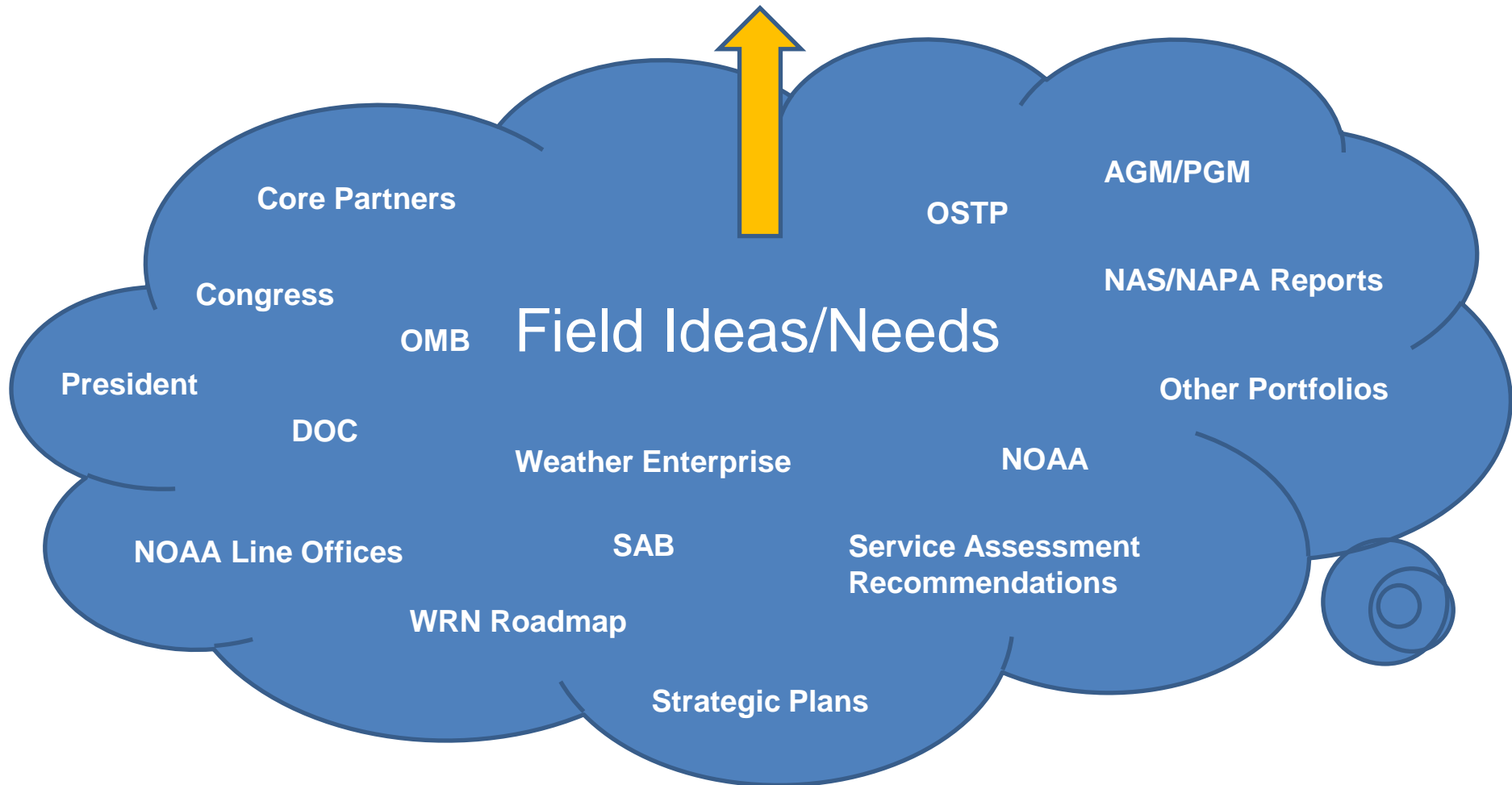
Chair: DAA

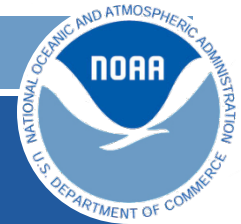
- Identifies and monitors internal and external enterprise risks and issues
- Approves mitigation strategies for enterprise risks



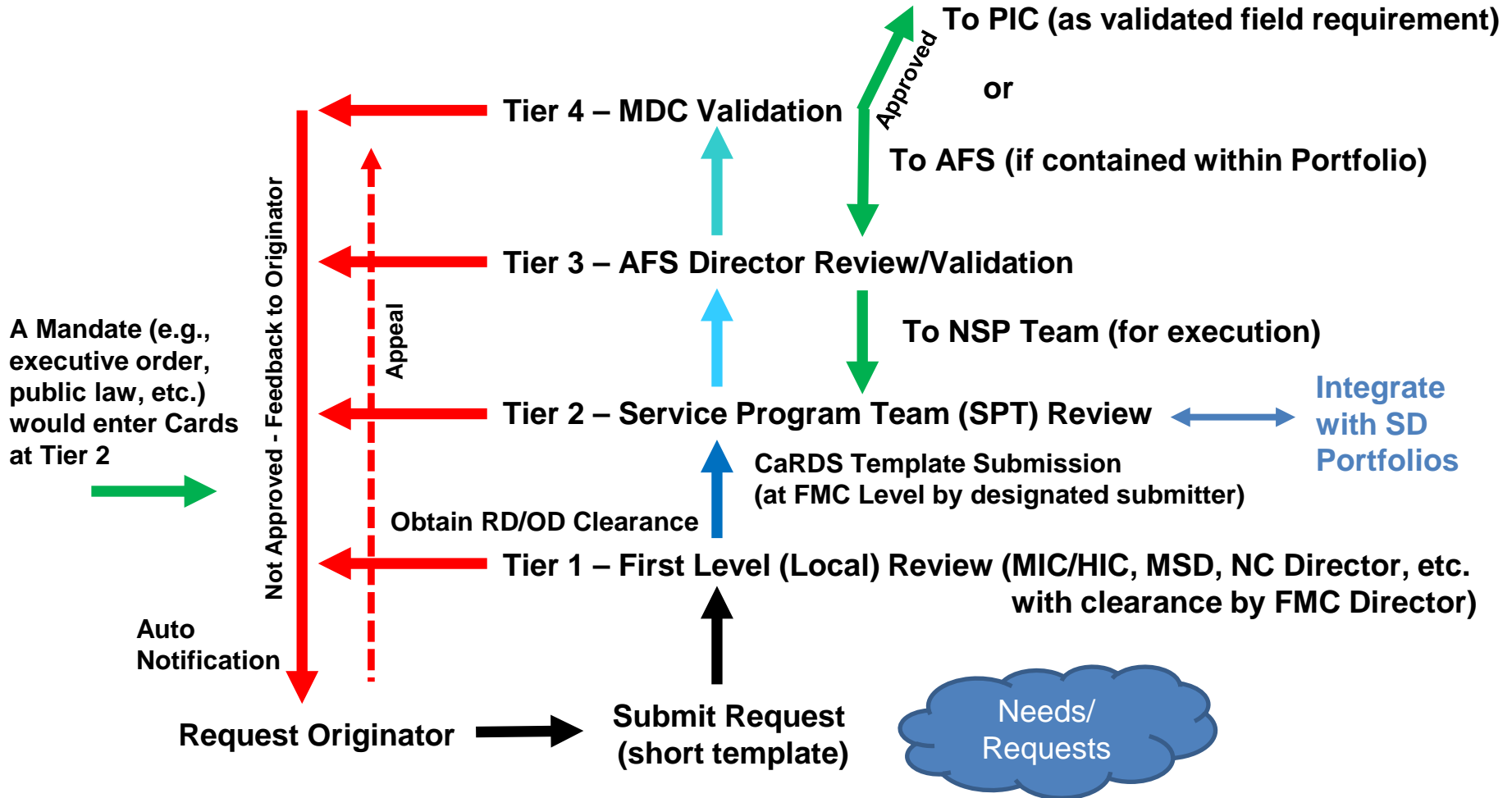
Requests can originate in many places

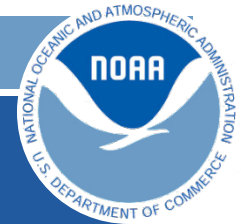
Requests need a process to be vetted/validated!



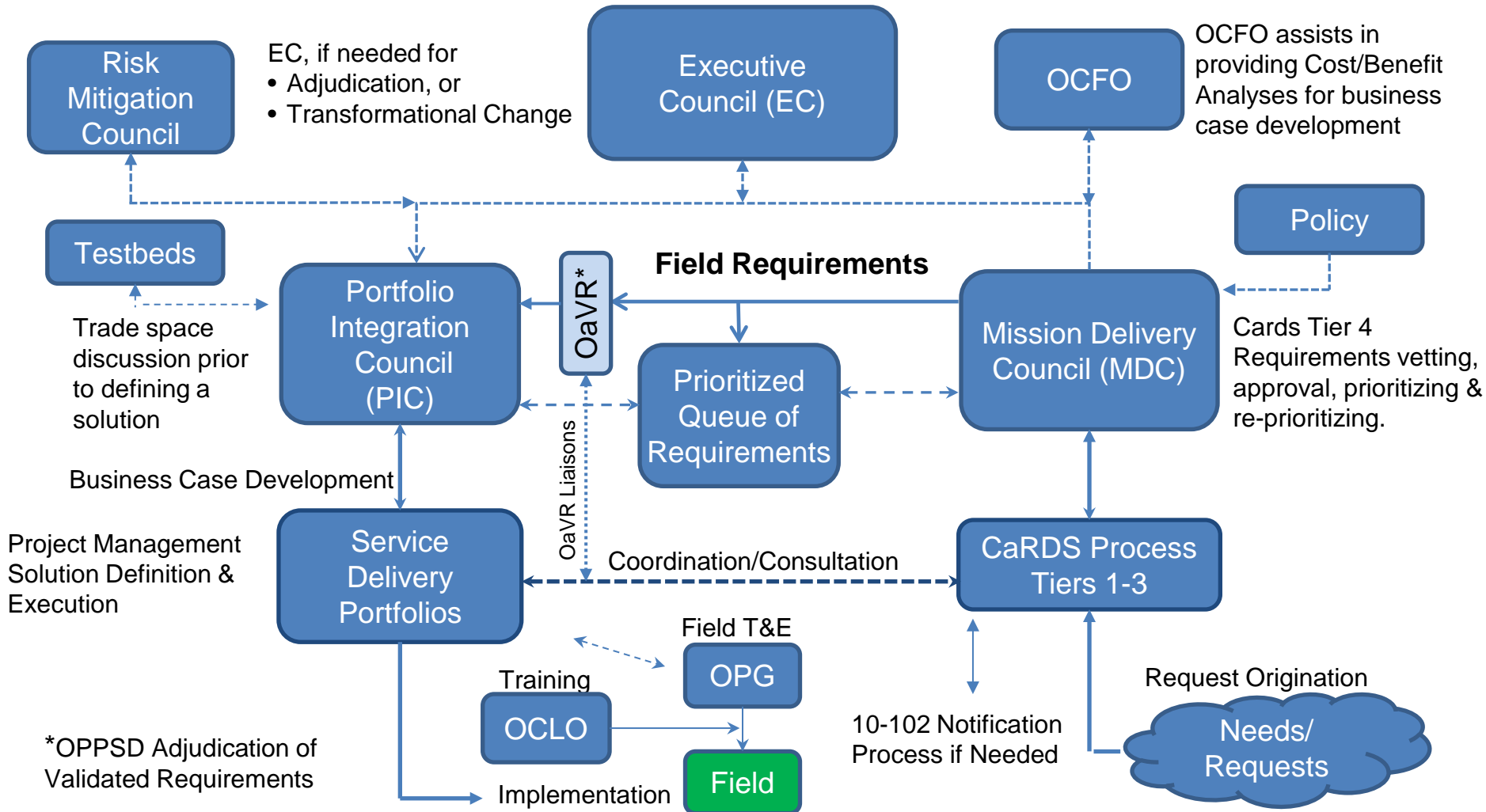


High-level Process Overview for CaRDS

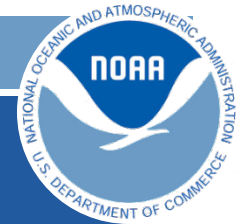




CaRDS in the Larger Organizational Context



*OPPSD Adjudication of Validated Requirements



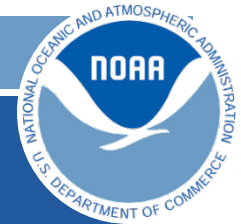
The Fuel that makes CaRDS go – People!

CaRDS Analysts: NWS Employees who are trained in and directly support the Governance Process in requirements documentation, status updates, coordinating analysis and validation and assisting with workflow necessary to carry out those activities.

Analysts have knowledge of the Governance Process, the organizational make-up, and skills in writing and reviewing requirements and other project documentation.

Staffing Needs:

- (1) CaRDS Home is the AFSO Analysis & Mission Support Division where a Branch Chief and at least one full-time analyst will be charged with the care & feeding of CaRDS (QA/QC, process oversight, scheduling, updating status and reports.)
- (2) Analyst support (episodic) from each of the National Service Programs (NSP). Each NSP will be required to set-up a **Service Program Team (SPTs)** for addressing requests/requirements.
- (3) Field FMCs to identify SMEs to work on SPTs in support of CaRDS process.
- (4) Requirements Leads to be identified within each OPPSD Portfolio Office to support requirements analysis efforts.
- (5) National Centers, NWC and Regions to identify representatives to be points of contact for CaRDS as **Designated Submitters**.

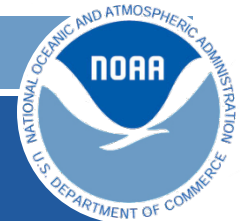


New Mission Need or Requirement Request Template

The following fields are required to enter a “request” into CaRDS:

- Request originator contact information
- Statement of Need (SON) that addresses the request
- Is there a time sensitivity with the request?
- Will the request fill an existing operational gap?
- Linkage to strategic driver or mandate
- Summary of benefits to NWS
- Link to a National Service Program (NSP)
- Rough Order Magnitude (ROM) estimate of investment





New Mission Need or Requirement Request Template

1 Statement of Mission Need or Requirement

1.1 Mission Need or Requirement

Provide a brief description of the request.

1.2 Time Sensitivity

If time sensitive, state when the request would need to be addressed and why.

1.3 Existing Operational Gaps

Describe the operational gaps, shortcomings, or challenges that will be addressed.

2 Justification and Benefits to the NWS

2.1 Strategic Drivers and Mandates

If available, link the request to a specific initiative, mandate, law, stakeholder need or other justification.

Table 2.1: Justification

Does the requirement address a mandate by NOAA, DOC, OMB, Executive Order, or Law?	Y/N
Is the requirement needed to satisfy a specific external organization's needs?	Y/N
Does the requirement address a specific DOC, NOAA, or NWS strategic initiative?	Y/N

Explanation of justification:

[Provide explanations to "yes" answers above. If the requirement addresses a strategic initiative, indicate which one and where (i.e., the NWS Phasing Diagram, NWS Planning Guidance Memo, NWS Weather-Ready Nation Roadmap 2.0, NWS Weather-Ready Nation Implementation Plan, or other (please specify). Be specific with any stated justification, ensuring strong linkage where applicable.]

2.2 Benefits

Identify how satisfying the request will benefit the NWS, partners, the public, or other stakeholders.

Table 2.2: Benefit to the NWS

Describe how the request will benefit NWS' mission to protect life and property.
Describe how the request will help the NWS better serve our partners and the public.
Describe how the request will improve how NWS operates.
Describe how the request will help NWS be a better steward of government resources (e.g., time or money).

Explanation of benefits to NWS:

[Provide the benefits in implementing this request addressing the above statements as applicable]

3 National Service Program

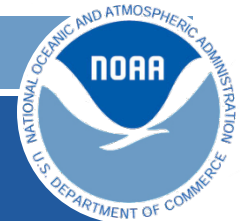
Identify the most appropriate Analyze, Forecast and Support National Service Program to vet and address this request.

Table 3.1: Identification of lead National Service Program

Program Name	X	Program Name	X	Program Name	X
Aviation		Tropical		Public	
Fire Weather		Winter Weather		Space Weather	
Marine		Climate		Tsunami	
Severe Weather		Hydrology		Overarching (broad cross-cutting)	

4 Estimated Resource Needs

Provide an estimate of resource needs associated with the request.



Designated Submitter Upload Form

Designated Submitter upload form: All that is required is to select the Mission Need or Requirement Request document and click on Submit Request. Submitter information is automatically populated.

Submit New Mission Need or Requirement Request

Please ensure that you have a completed Request document to upload. For instructions, click [here](#).

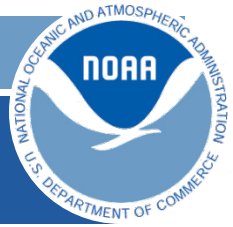
Note: As a Designated Submitter you should ensure that this Request:

- Is appropriate, Applicable and provides benefits to NWS
- Is consistent with Policy
- Has been made visible to the FMC Director as appropriate
- Has been reviewed for possible conflict or inclusion with other known efforts underway

Submitter:	Name Carlos Diaz	Office w/AFS13	Email Carlos.Diaz@noaa.gov	Phone (301) 427-9303
REQUIRED:	Mission Need or Requirement Request Document			
	<input type="button" value="Choose File"/> No file chosen			
Comments: (Optional)	<small><OPTIONAL> Enter comments or additional information on this submission</small>			

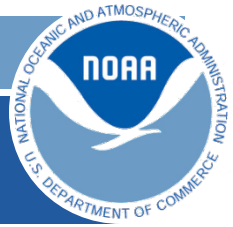
Submit Request

Cancel and Go back



Next Steps

- **Integrate approved process into NWS Governance Document v2**
- **Identify Designated Submitters**
- **New Procedural Directive (Instruction)**
- **Begin using the process**



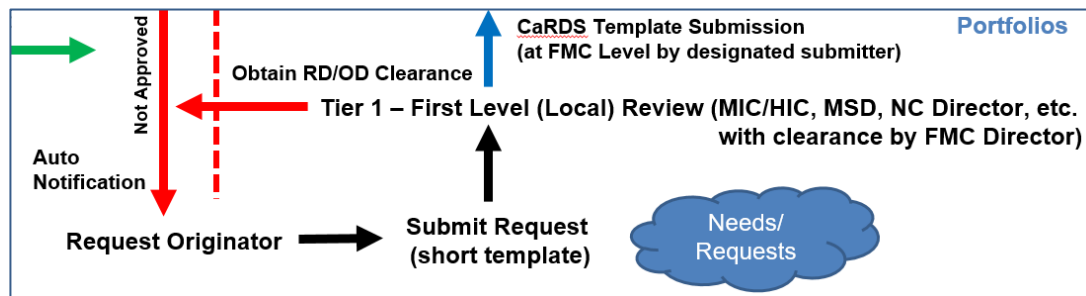
CaRDS – Backup Slides

Backup Slides

The following slides provide additional Tier 1-4 details

CaRDS Process Flow – Tier 1

Step 1 – A request is generated by an internal or external entity. If external, then a NWS staff will champion origination of a request.



Step 2 – Complete the short submission template. Includes a description of the request, statement of need, strategic linkage, benefits and identifying/contact information including linkage to a National Service Program (NSP). Provide to local manager (MSD, Center Director, MIC/HIC, Branch Chief, etc.) for review. Focus should be on applicability, appropriateness of mission, adherence to policy and benefit to the organization or enterprise.

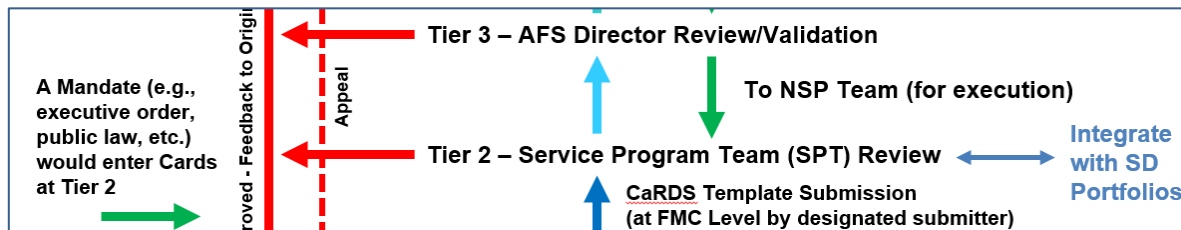
Approved – Send to FMC representative (Designated Submitter) for clearance and upload the completed template to the CaRDS site.

Not Approved – Provide feedback to request originator with an explanation of why the request was not approved for further consideration.

CaRDS Process Flow – Tier 2

Step 3 – Using information from the submission template, the CaRDS analyst will route the

information to the appropriate Program Lead where the SPT will review. It is at this tier that cross Portfolio coordination should take place, as appropriate, to focus on requirements, not on solutions. Note: If the input is a mandate (e.g., executive order), then the submission starts at Tier 2, and the appropriate NSP will normally own the request.

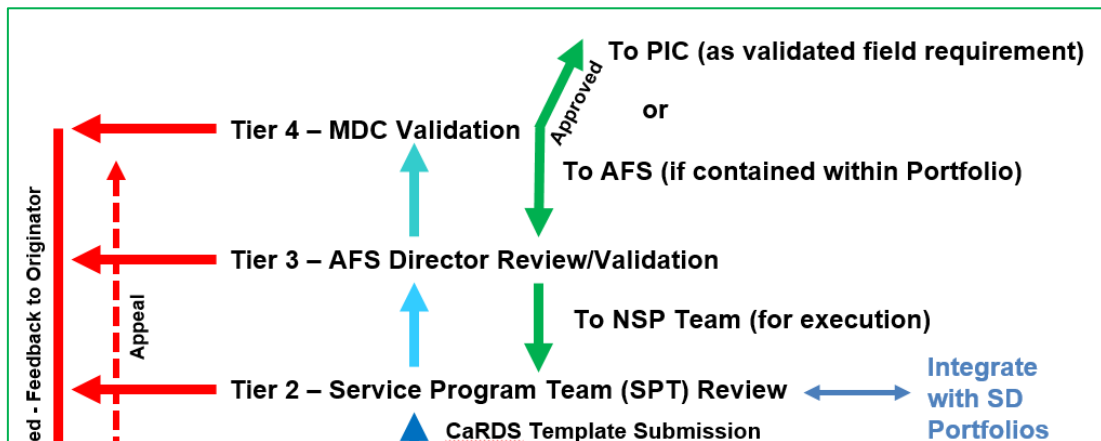


Step 4 – The SPT will schedule periodic reviews of submitted requests which includes representatives from all appropriate field units. Obtain pre-decisional input from NWSEO Advisor to the team. The NSP considers the mission impact, if this is a duplication of effort, if it provides a priority for the Request linked with NSP strategic plans, and if there is a need for public notification via the 10-102 Directive.

- Approved** – Request is forwarded for Tier 3 review. Originator is notified.
- Not Approved** – Request originator and manager (Tier 1 reviewer) are notified with an explanation.

CaRDS Process Flow – Tier 3

Step 5 – AFS Director reviews with focus on national policy implications (e.g. public/private policy, 10-102 considerations), if it will require NWSEO negotiations, if it is a transformational change, and if it links to strategic phasing diagrams.



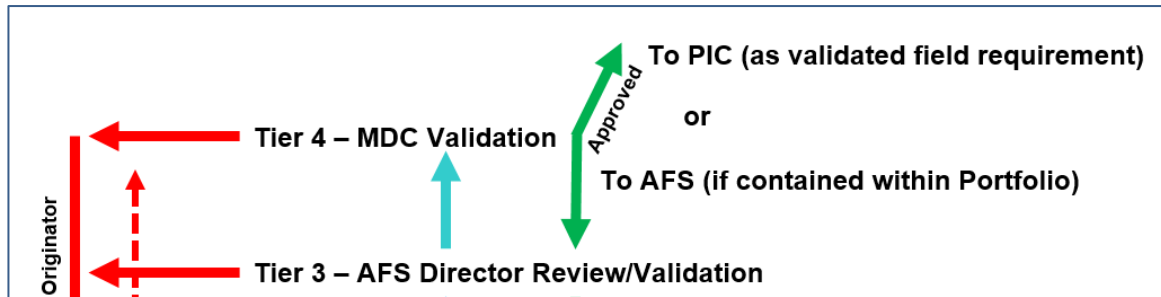
Validated – If the Request passes all tests, has clear cross-program linkages, is a benefit to the organization and does not require significant resources, negotiations or policy changes, AFS promotes the Request to be a Validated Field Requirement. MDC, NSP and originator are notified.

Approved – If the Request passes all tests, but requires significant resources, policy changes, or negotiations, the request is routed to the MDC for consideration. AFS Director will champion.

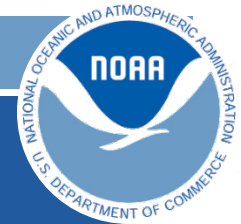
Not Approved – A summary explanation will be provided to the appropriate NSP, the Request originator and his/her manager (Tier 1 reviewer). An appeal can be made to proceed to Tier 4.

CaRDS Process Flow – Tier 4

Step 6 – The MDC will be provided the complete (short) templates for each Tier 4 Request. The AFS Director and appropriate SMEs will present the Requests to the MDC for decision on promoting the Request to a Field Requirement. MDC to consider corporate priorities, mission space, strategic linkages, and appeals. MDC to prioritize and rank according to criteria on Slide 5.

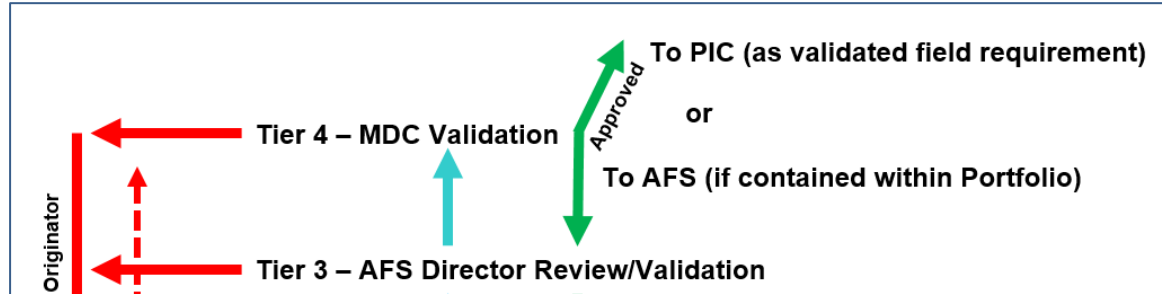


- Validated** – If the requirement is contained within AFS, then it is routed back to AFSDO to be included with programmatic strategic plans.
- Validated** – If the requirement requires resources from one (or more) of the OPPSD/Service Delivery Portfolios, it is routed to OPPSD for consideration by the PIC. AFS Director will report back to the MDC on the review by the PIC.
- Not Approved** – A summary of the review decision is provided for distribution down the chain to include the Request originator.



CaRDS Process Flow – MDC to PIC

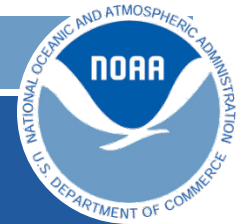
Step 7 – The MDC will provide a list of prioritized, validated requirements to the PIC for those items that require solutions from the Service Delivery Portfolios.



The MDC can solicit assistance from OCFO for cost/benefit analyses to support the development of a business case. The EC can be used for adjudication or if the requirement is considered to be transformational in nature.

Step 8 – The PIC will consider the list of prioritized, validated field requirements in the context of available resources (trade space analysis). A parking lot of prioritized field requirements will be maintained when requirements exceed available resources. For those requirements not on the parking lot, the PIC will provide engineering solutions, tradeoffs and risks (if any) to the MDC. The Operations Proving Ground (OPG) will be utilized, as appropriate, to test solutions prior to implementing.

The MDC will continually re-prioritize requirements in the parking lot to assist the PIC with decision making on behalf of field needs.



Revisiting the High-level Process Overview for CaRDS

