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Collection Management and Targeting Architecture

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Prepared for: Joint Staff, J2S

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Table of Contents

1.0 Introduction	1
2.0 Sources, Development, and Validation	3
3.0 CMT Activity OV-5 Structure	5
4.0 CMT Activities	7
4.1 General Description	7
4.2 Battle Rhythm	7
4.3 AOC Organizations	10
4.4 AOC Divisions Descriptions	11
5.0 Organization Swim-Lane OV-5	15
5.1 Collection Management and Targeting Organizations	15
5.2 Visio Representations	15
5.3 Architecture Structure	16
5.4 Activity Blocks and Process Flow	19
5.5 Information Distribution and Availability	22
Appendix A. Sub-Activity OV-5 Diagrams	25
Appendix B. CMT Operational Activities	31
Appendix C. CMT Organizational Swim-Lane OV-5	45
Appendix D. Acronyms	67
Initial Distribution List	71

List of Tables

Table 1. Battle rhythm times defined in the AOC documents.	8
Table B1. Spreadsheet of all four levels of CMT operational activities.	31

List of Figures

Figure 1. Color and alpha-numeric codes for CMT activity blocks.	5
Figure 2: First two levels of the CMT activity hierarchy OV-5.	6
Figure 3. Examples of activity, information, and decision blocks.	16
Figure 4. Portion of the JIPTL Visio, showing some higher-level organization's activities.	16
Figure 5. Portion of the ATO Visio, showing some AOC Combat Plans Division activities.	17
Figure 6. Organization groupings indicated by solid and dashed lines.	18
Figure 7. Target lists example activity flow.	19
Figure 8. Example of information block utilization, forwarding for later use.	19
Figure 9. Information block example, information transfer between activities.	20
Figure 10. Information block example, information transfer between activities.	20
Figure 11. Use of information blocks between and within a Visio diagram.	21

Figure 12. Distribution of information to organizations for multiple uses.	22
Figure A1. First two sub-activity levels under primary activity Guidance.	25
Figure A2. First two sub-activity levels under primary activity Collection.	26
Figure A3. First two sub-activity levels under primary activity Targeting.	26
Figure A4. First two sub-activity levels under primary activity ATO.	27
Figure A5. First two sub-activity levels under primary activity Execution.	27
Figure A6. First two sub-activity levels under primary activity PED.	28
Figure A7. First two sub-activity levels under primary activity DT.	28
Figure A7. First two sub-activity levels under primary activity AHC.	29
Figure C1. Segmented Visio Diagrams	46

1.0 INTRODUCTION

The Joint Intelligence Interoperability Board (JIIB) provides guidance and tasking for developing and insuring the interoperability of DoD systems. Part of this program is a semi-annual interoperability experiment, the JIIB System Baseline Assessment (JSBA). A full JSBA consists of several phases, culminating in a laboratory experiment followed by an operational experiment. For years 04, 05, and 06 one of the phases has been model/architecture development. In FY04 a targeting architecture and model were developed, collection management in FY05, and combined collection management and targeting in FY06. The combined model, CMT, is the subject of this report.

The purpose of the JSBA modeling tasks associated with this project are:

- Develop a baseline architecture for the experiment's operational activities.
- Provide an OV-5 baseline architecture for the Department of Defense Architectural Framework (DODAF).
- Provide an experiment OV-5 architecture.
- Provide a basis for experiment OV-6c architectures.
- Develop simulations that can assist experiment planning and analysis.

The first objective of this project was to create a baseline architecture, one that is doctrinally correct. For this reason, the AOC documents listed in the next section were the primary sources of information. In addition, the architecture was to support the JSBA program, which focuses on real-world operations. Current operations are in a continual state of adaptation to meet daily operational requirements. Also, even though there is a great deal of consistency in activities undertaken, different theaters do not follow exactly the same procedures. These disparate conditions present a problem for architecture development. As is usual, we compromised. We used current doctrine as the starting point, made the minimum number of adjustments to conform to current CENTCOM procedures, and added some procedures to conform to current extensive use of reach-back to CONUS for Information, Surveillance, and Reconnaissance (ISR) and for Processing, Exploitation, and Dissemination (PED).

This report describes the process and results for the second project task, development of the OV-5 baseline architecture. Contained are:

- Descriptions of the sources and assumptions used.
- Descriptions of the architecture development procedures.
- Description of the architecture verification procedures.
- Text description of the architecture.

- Operational activity hierarchy OV-5 architecture. (Activity OV-5)
- Organization swim-lane OV-5 architecture. (Organization OV-5)
- Spreadsheet of four levels of operational activities.

The organization swim-lane is perhaps the most important of the products. It provides a visualization of the relationships between the operational activities, the information exchanged between them, and the performing organizations. It is this structure that was used for architecture verification.

The architecture hierarchy OV-5 is described before the organization swim-lane version because it is the simplest view. It also provides an easy visualization of the color code used in the architectures.

The spreadsheet contains a list of the principal information components exchanged between the operational activities. The organization swim-lane diagrams also contain some information exchanges, but not as complete.

2.0 Sources, Development, and Validation

The CMT architecture was derived from the Air Operations Center (AOC) targeting and collection management activities as described in:

1. **Air Force Operational Tactics, Techniques and Procedures 2-3.2**, Air and Space Operations Center, 13 December 2004.
2. **Air Force Instruction 13-1AOC, Volume 3, Space, Missile, Command and Control. Operational Procedures** –Air and Space Operations Center, 1 August 2005.
3. **FM 6-20-10. Tactics Techniques and Procedures for the Targeting Process**, 8 May 1996.
4. **Joint Publication 3-30, Command and Control for Joint Air Operations**, 5 June 2003.

These documents cover all of AOC operations. CMT activities extracted from them are:

- Guidance and directives
- Collection management
- Targeting
- Joint Forces Air Component Commander (JFACC) approval
- Higher headquarters (HHQ) approval
- Air Tasking Order (ATO)
- Targeting and collection execution
- Asset status reporting
- Mission reporting
- Processing, exploitation, and dissemination (PED)
- Dynamic targeting
- Ad-hoc collection
- Wing Operations Centers' targeting and collection actions

These activities are described with varying degrees of completeness in the documents. Information in the documents was augmented by consulting with collection managers and targeteers at several meetings. This led to augmentation of the architecture, such as by inclusion of the Joint Fires Element (JFE).

As noted above, only CMT activities were extracted from the documents. Also, not all collection management and targeting activities were extracted. Four levels of CMT activities are used. The following is an example of the alphanumeric coding:

C2.3.1 = Collection:

2nd sub-activity under "Collection" (RFI),

3rd sub-activity under "RFI" (Research RFIs),

1st sub-activity under "Research RFIs" (Analytical Cell determines if they can answer).

Descriptions of the activities, indicated in brackets in the above example, are found in the spreadsheet contained in Appendix B.

There are many lower-level activities that are not included. They are contained within those that are included and could be added to the architecture with no change to the existing structure.

In order to have a complete CMT architecture, other activities than those described in the AOC documents had to be included. They are:

- Generic component command fires and collection
- Generic coalition command fires and collection
- Joint Forces Commander and Combined Command board's review and approval
- Supporting J2 organizations requests and information processing
- Federated exploitation
- MIDB maintenance

As with AOC activities, not all activities performed by these other organizations are included, only those required by collection management and targeting.

Extensive validation of CMT has been done. The full model was presented to and reviewed by the following people/organizations:

CENTCOM targeteer.

Langley AFB AOC collection managers.

Langley AFB AOC targeteers.

Joint Staff J2T.

There was a comforting uniformity of opinions about the models match to current operational procedures. This was an indication that CMT is a good baseline for current operations as well as conforming to doctrine.

3.0 CMT ACTIVITY OV-5 STRUCTURE

As noted in the Introduction, two types of OV-5 have been produced. This section describes the Activity OV-5, which has operational activities in a hierarchy. It is presented first because it provides an easy-to-visualize explanation of the color-coding used in both types. All CMT OV-5 architectures are contained in Visio 2003 diagrams.

CMT is organized into 8 primary (top-level) activities:

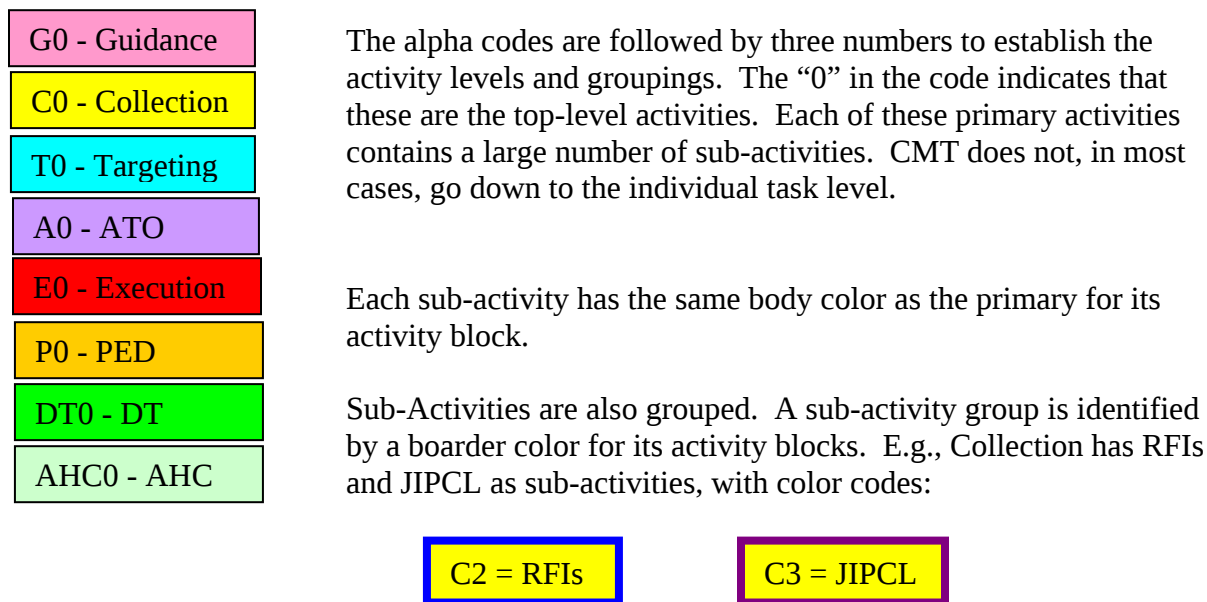


Figure 1. Color and alpha-numeric codes for CMT activity blocks.

PED = Processing, Exploitation, and Dissemination.

DT = Dynamic Targeting.

AHC = Ad-Hoc Collection.

Following is the CMT activity hierarchy OV-5 that shows the first two activity levels. Note that the block outline colors are arranged so that the outline color is the same across each row (except Execution). This is done so that the sub-activities of the same type, for each activity, are aligned for ease of visualization. E.g., those blocks that represent initial information input for an activity all have no outline color, all plans for an activity have a green boundary.

The figure is somewhat difficult to read. The original Visios are much better.

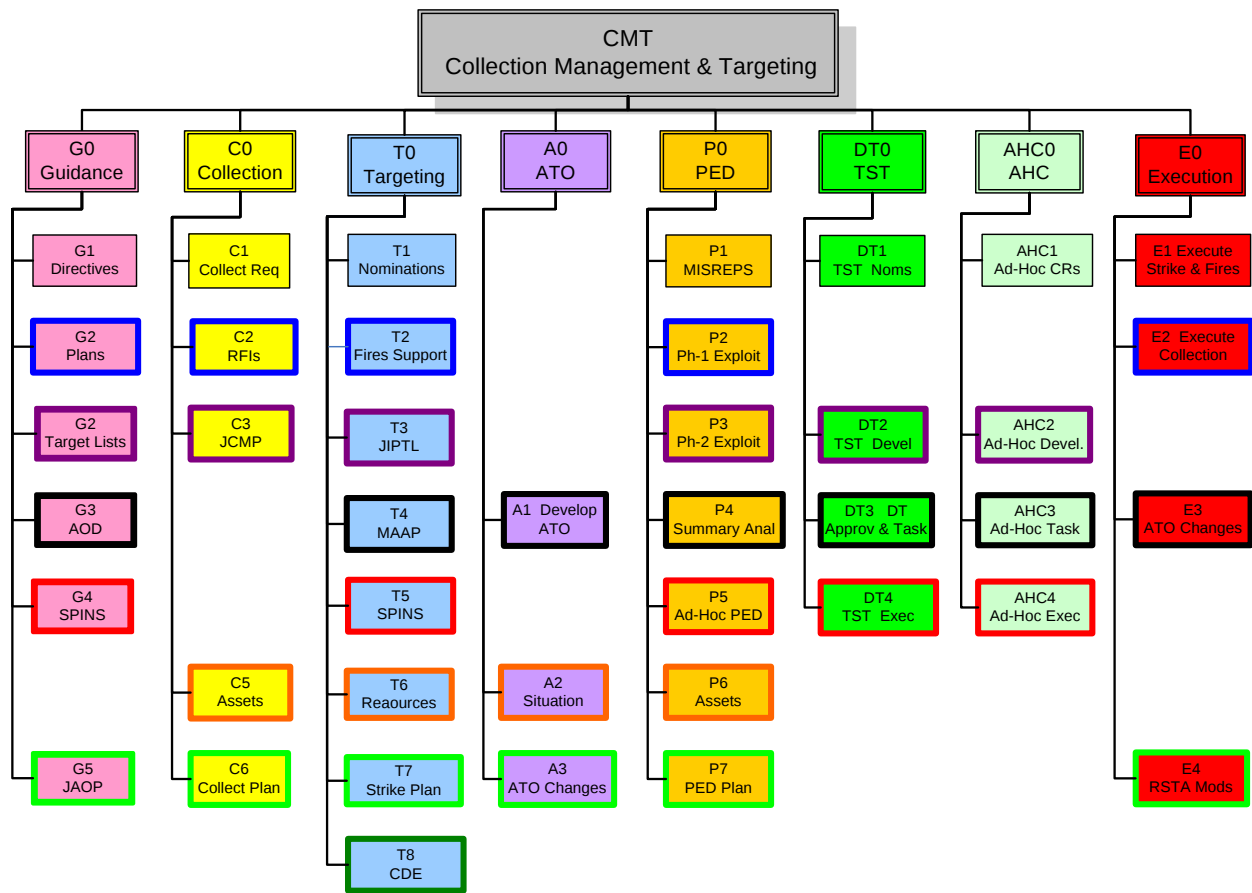


Figure 2: First two levels of the CMT activity hierarchy OV-5.

The sub-activity OV-5s are in Appendix A.

4.0 CMT ACTIVITIES

4.1 General Description

The following does not describe any particular activities. It provides a general description of how the AOC operates, resulting in a general description of the model.

The AOC operates on the 72 hour ATO cycle. During that time it has three ATOs in various stages of development. CMT does not indicate possible interactions between the three ATOs other than re-taskings after an ATO's execution is complete. The model follows the activities for a single planning cycle.

Many collection management and targeting activities are semi-continuous. A model like CMT shows activities as sequential, the output from one activity provides information for subsequent activities. CMT makes some allowance for continuous processes in the way information is passed to organizations then made available for subsequent activities as needed. This is not a perfect solution but adequate for this level of modeling. Simulations developed from this type of discrete activity representation have to have built in accommodation for information inputs and outputs that occur over extended periods of time.

A significant fraction of the information used by the AOC for their operational activities, especially early in the campaign, is developed prior to the campaign, some long before the commencement of the operation. These products may be modified shortly before the campaign through Intelligence Preparation of the Battlespace (IPB) activities. Guidance and directives are modified to fit the situation as the crisis becomes imminent. Many products are periodically or continuously updated, such as Rules of Engagement (ROE) and Priority Information Requirements (PIR). CMT does not include information product development before the campaign and only shows a few instances of information update activities.

The reference documents are often not specific, or at least all inclusive, about where the outputs of various Cells, Teams and Divisions are distributed. This is in part due to the trend to post information to web sites. In the CMT diagrams, the flow of information is often restricted just to the organization which will process the information next and/or to a distribution to the AOC Divisions. It is assumed that Divisions make the information available to all of their Teams and Cells.

4.2 Battle Rhythm

Many of the AOC's activities are tied to the ATO battle rhythm. Unfortunately, the documents are spotty in defining the precise time of various events, actions, or meetings in the ATO cycle. What is available has been extracted and is presented in the following table.

The table shows the timeline for the ATO cycle including the targeting and collection management processes. In column 2, two times are reported for the events or actions; the time that remains prior to execution of that ATO and the time of day. The cycle begins with the AOD development meeting at 0600 and ends with the start of ATO execution at 0600, 72 hours later. The reference numbers cited in column 3 correspond to those defined in Section 2.

Table 1. Battle rhythm times defined in the AOC documents.

Event	Out from ATO /time of day	Reference	Remarks
ACP submitted for approval			
ACP approval			
ACP dissemination			
JAOP submission for approval			
JFACC JAOP approval		Ref. 1, 3-13	
JFC JAOP approval		Ref. 1, 3-18?	
JAOP dissemination			
AOD development meeting	72/0600	Ref. 1, 3-50	Start of ATO cycle.
AOD submitted for approval			
JFACC Strategy and Assessment Brief	68/1000	Ref. 1, 3-5, 3-18	Daily. Approves AOD
AOD disseminated	66/1200?	Ref. 1, 1-13, 3-5, slide	Disseminated daily after approval in JFACC Strategy and Assessment brief. Ref. 1, 4-11 indicates this occurs 60 hours out.
Submit apportionment recommendation for approval			If separate from AOD
JFACC apportionment approval		Ref. 2, 18	If separate from AOD
JFC apportionment approval		Ref. 2, 18	If separate from AOD
Apportionment dissemination			If separate from AOD
OAR and SITREP completed			
OAR disseminated	66/1200	Ref. 1, 3-5	Product of previous ATO cycle
JTL, RTL, NSL disseminated	60/1800	Ref. 1, 4-11	Distributed twice per day. To be posted in automated JIPTL application. Source COCOM J2
CTLs due	53/0100	Ref. 1, 4-13	Received by Target Development Cell
Merged CTLs disseminated (TNL)	48/0600	Ref. 1, 4-14, slide, Ref. 4, III-21	Assumed time sent from Target Development Cell to TET
JTL, RTL, NSL disseminated	48/0600	Ref. 1, 4-11	Twice per day. To be posted in automated JIPTL application
Draft strike JIPTL	47/0700	Ref. 1, 4-14	TET JIPTL review. Estimate the cut line
TET Meeting	43/1100	Ref. 1, 4-19	Draft JIPTL forwarded to JFACC for approval
JFACC Strategy Update brief	39/1500?	Ref. 1, 4-19, Ref. 2, 25	Approval of JIPTL. Ref. 1, 1-13 implies JIPTL approved at

			1200. Is Update brief same as Strategy and Assessment brief?
Develop combined JIPTL			J3/JFE merges strike and fires CTLs
JTCB JIPTL approval		Ref. 2, 25	
JIPTL dissemination			
Draft Sortie flow	38/1600	Ref. 1, 4-35	Produced by CPD/MAAP/Force Allocation Cell
Cutoff for CPCL nominations	37/1700	Ref. 1, 4-19	Sent to COCOM J2
JTCB	36/1800?	Ref. 4, III-21	Approve JIPTL. Reference 1, 6-17 says 1830
Pre-MAAP meeting	36/1800	Ref. 1, 4-24	First formal meeting of MAAP Team
AIRSUPREQ	33/2100	Ref. 4, III-21; Ref. 3, 3-3	Sent from requesting to supporting component
ALLOREQ	~30/2400	Ref. 4, III-21; Ref. 3, 3-3	Sent from components to JFACC
JIPCL submission for approval			
JCWG. JIPCL approval Develop JCMP	28?/0200	Ref. 1, 6-17, 6-112, 6-114	Snapshot and review of today's ISR OP, final review of tomorrow's ISR plan, discussion of plan 48 hours out, discussion of ISR strategy 72 hours out
JCMB JCMP approval			Ref. 1, 6-17 says JCMB VTC at 1630. Not consistent with JCWG approval time
All MAAP inputs into TBMCS	24/0600	Ref. 1, 4-31	Except tanker data
JFACC MAAP Decision Brief	22/0800?	Ref. 1, 4-31, brief	Approves MAAP. Reference 1, 1-13 implies the MAAP approved at 0 hours. Ref. 4, III-21 states MAAP approved at 1600
ATO sortie flow disseminated (=SORTIEALOT?)	20/1000?	Ref. 1, 4-35, 4-36	To unit planning cells and CPD website. Ref. 4, III-21 shows SORTIEALOT going out at 1600. Ref. 3, 3-3 shows it going out 19 hours prior to ATO initiation
MAAP Script Disseminated	20/1000?	Ref. 1, 4-60	To unit planning cells and CPD website. Ref. 1, 4-86 indicates

			disseminated 16 hours out.
RSTA Annex (JCMP) disseminated			
SPINS due to SPINS coordinator	20/1000	Ref. 1, 4-118	
SPINS due to ATO automation	16/1400	Ref. 1, 4-129	
Component FSPs/ABPs received	16/1400	Ref. 1, 4-86, 4-129	Component ATOs for organic assets. Received by ATO team.
Merge ABPs	14/1600	Ref. 1, 4-86	
ATO submitted for approval			
ATO JFACC approval			
ATO JFC approval	14/1600	Ref. 4, III-21	Time inconsistent with merge ABP time
JCMB JIPCL approval	13.5?/1630, 2000	Ref. 1, 1-11, 6-17, 3-5, 6-111	Time not consistent with JCWG approval time
National noms due to collections	13.5?/1630	Ref. 1, 6-17	
ATO push	12/1800?	Ref. 1, 4-29, 4-86, 1-13, A18-1	Ref. 1, 4-30 says ATO push at 1200
ACO dissemination	12/1800?	Ref. 1, 4-98, 4-99	May be included with ATO (Ref. 1, 4-92)
Initiate ATO execution	0/600	slide	
End ATO execution	-24/600	slide	
Dissemination of MISREPS, BDAREPS, BDASUM			
OAR disseminated	-30/1200	Ref. 1, 3-5	

4.3 AOC Organizations

Within the AOC collection management and targeting activities are performed by the following Divisions, Teams, and Cells. Not all parts of the AOC organization are listed, only those that participate in the modeled activities.

Air Operations Center

- Strategy Division (SD)
 - o Plans Team (SD/SPT)
 - o Guidance Team (SD/SGT)
 - o Operational Assessment Team (SD/OAT)
- Combat Plans Division (CPD)
 - o Targeting Effects Team (CPD/TET)
 - o Master Air Attack Plan Team (CPD/MAAP)

- o Air Tasking Order Team (CPD/ATO)
 - o C2 Planning Team (CPD/C2P)
 - Airspace Management Cell (CPD/C2P/AMC)
- Combat Operations Division (COD)
 - o Offensive Operations Team (COD/OOT)
 - Dynamic Targeting Cell (COD/OOT/DTC)
 - o Defensive Operations Team (COD/DOT)
 - o Senior Intelligence Duty Officer Team (COD/SIDO)
 - Multi-Int Exploitation Cell (COD/SIDO/MEC)
 - o Interface Control Team (COD/ICT)
- Intelligence Surveillance and Reconnaissance Division (ISRD)
 - o Analysis Correlation and Fusion Team (ISRD/ACF)
 - Analytical Cell (ISRD/ACF/AC)
 - Unit Support Cell (ISRD/ACF/USC)
 - o Targets Combat Assessment Team (ISRD/TCA)
 - Target Development Cell (ISRD/TCA/TDC)
 - Combat Assessment (ISRD/TCA/CA)
 - o ISR Operations Team (ISRD/ISROPS)
 - Collection Management Cell (ISRD/ISROPS/CM)
 - Requests for Information Cell (ISRD/ISROPS/RFI)
 - Multi-Int Exploitation Cell (ISRD/ISROPS/MEC)
 - PED Cell (ISRD/ISROPS/PED)

4.4 AOC Divisions Descriptions

It is useful to describe some of the general activities of the divisions. This follows.

Strategy Division (SD)

The model uses data inputs to the SD as its starting point. High-level information inputs include courses of action, centers of gravity (COG), named areas of interest (NAI), target area of interest (TAI), high value targets (HVT), and priority information requirements (PIR).

The Visio diagram would be very cluttered if each of the individual data inputs to each Division, Team and Cell were represented in the figure. The diagram only represents the data flow into the Division; it is assumed that the Division disseminates these data, as required, to its constituent Teams and Cells. An additional important point with regard to the data input is that many of these data are continuously, or periodically, updated. It is assumed that these updates are disseminated/pulled, as available, and that each organization is working with the latest accessible versions of the required input data. These data updates are not represented in the Visio Diagram.

Many deliverables/products contain many pieces of information. For example, the Joint Air Operations Plan (JAOP) contains: Joint Air Attack Plan (JAAP), COGs, Courses of Action (COA), HVTs, Guidance, Objectives, Measures of Effectiveness (MOE), etc. For the most part, these individual data elements are not represented in the architecture.

The reference documents are somewhat unclear about which SD Team is responsible for developing the daily apportionment recommendation (for 96+ hours out). In the model it is represented by apportionment recommendations from the TET and SGT into the SPT, which develops the recommendation and presents it to the JFACC. It is also not clear when in the timeline the daily apportionment recommendation is presented and approved.

The OAT develops the OAR that is an input to the AOD. This input is represented in the early part of the architecture but the assessment inputs on which it is based are not. The OAR is based on assessments from an earlier ATO, and that ATO's documentation, which are not represented in the architecture. Assessments from this ATO cycle, and the ATO documentation, are represented as flowing into the OAT on the right side of the architecture diagram. Similarly for the OAT SITREP

Combat Plans Division (CPD)

The TET validates the nominated targets with respect to a number of criteria (e.g., JTL, ROE, NSL, RTL, etc.). These individual evaluations are not represented in the architecture but could be individually modeled to that level of activity detail needed, such as to support the representation of each individual decision.

The description of the MAAP Team indicates there may be a number of cells that produce some of the products of this team. But the existence and nomenclature of these cells will differ with Commands. Therefore these Cells are not identified in the architecture and all products are considered to be produced by the MAAP Team.

Several of the Cells in the MAAP team generate collection requests/RFIs in support of targeting, including ATO validation for moving targets and BDA. These requirements clearly need to be included in the current collection cycle. According to Reference 1 (4-19), the cutoff for the CPCL is 37/1700. But the pre-MAP meeting occurs at 36/1800. The generation of the collection requirements from the MAAP process appears incompatible with the CPCL schedule. In the architecture the MAAP CRs are shown to be generated at 37/1700.

Combat Operations Division (COD)

The COD/OOT monitors ATO execution and, after the start of execution, initiates ATO and ACO changes as required. It ensures these changes are received by the affected executing units. This is represented in the architecture by communication to the Wing Operations Center.

The DTC is responsible for validating and prosecuting ad-hoc/dynamic target/TST nominations. These targets may originate from any source. In practice most are received from the SIDO Team. These are shown in the architecture as originating with the SIDO MEC. Nominations are also shown to originate with the COD/OOT, The ISRD/ISR OPS/MEC, and the COD/DOT TBM Cell.

Collection requests that the DTC generates for dynamic targets are shown being directed to the SIDO Team not the ISRD/ISR OPS/CM Cell.

Unlike deliberate processes DTC processes cannot be tied into a fixed ATO cycle. The DT process is outside of the ATO cycle but interacts with it. All DTC processes are conducted continuously. The ATO cycle often deals in target lists and cutoff times. The DTC deals in individual targets and continually processing and inserting the targets as changes to the current ATO at the earliest opportunity.

In the DTC there are two places where nominated targets may be forwarded for inclusion into the next ATO. Firstly, if the nominated DT/TST is not validated as a TST it is forwarded to Target Development for possible inclusion in the next ATO cycle. Secondly, if a target on the ATO was displaced by a TST, and an alternative strike package cannot be found for it in the current ATO, it is forwarded to the MAAP for inclusion into the next ATO.

Intelligence, Surveillance and Reconnaissance Division (ISR)

The IPB produced by the ISR/ACF is the primary stimulation for what is produced in the ATO cycle. IPB is generated before crisis. It is continuously updated, which is not represented in the architecture. The transmission of IPB information includes: threat COAs, threat COGs, NAI, TAI, HPTs and HVT. As the ACF generates these data they also generate suggested PIRs and CRs that will fill revealed intelligence gaps and are diagnostic of the COA that the threat is following.

Within the ISR Target/Casualty Assessment Team, target development activity is focused in the early part of the ATO cycle where it develops the JFACC CTL and the integrated TNL for which it validates and weaponeers the targets. CA efforts are focused in the late part of the ATO cycle with the assessment of the strikes. Inputs to the CA cell include MISREPS, INFLTREPS and input from PED nodes. The latter are represented by inputs from the COD/SIDO/MEC, ISR/ISROPS/MEC, Coalition PED, and Component PED Cells.

The PED process is considered to be part of the collection management process.

DT.

The DT process is shown in a separate architecture diagram primarily because it occurs outside of the ATO cycle

DT terminology is somewhat confusing. The DTC will handle dynamic targets, DTs, emerging targets, diverts, re-rolls and re-strikes that are imposed on the defined ATO target scheme, often displacing those ATO targets. The distinction between DT and TSTs is not precisely defined. The implication is that TSTs are a command defined subset of dynamic targets. Only DT is used here.

The representative WOC strike and ISR assets in the architecture are placeholders for multiple assets. When a DT strike is sent to the strike asset followed by orders for a strike against the ATO target displaced by the DT target, any one of multiple assets could be used.

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5.0 ORGANIZATION SWIM-LANE OV-5

5.1. Collection Management and Targeting Organizations

Organization swim-lane OV-5s show the organizations that perform the CMT operational activities. The AOC organizations (Divisions, Teams, and Cells) were listed in Section 4. The following organizations are also included:

- National Assets
- Supporting J2s
- COCOM J2
- JFC
- JFE/J3
- JTCB
- JTWG
- JCMB
- JFACC
- Wing Operations Center Strike Assets (WOC/Strike)
- Wing Operations Center ISR Assets (WOC/ISR)
- Component Command (Comp/Cmd)
- Component ISR Assets (Comp/ISR)
- Component Strike/Fires Assets (Comp/Strike)
- Component PED (Comp/PED)
- Coalition Command (Coal/Cmd)
- Coalition ISR Asset (Coal/ISR)
- Coalition Strike/Fires Asset (Coal/Strike)
- Coalition PED (Coal/PED)

In this representation, each organization has a swim lane that contains the activities for which it is responsible. Figures 6 and 7 show small sections of the model, illustrating how the organizations are indicated on the left and activities they perform are blocks in their swim-lane.

5.2 Visio Representations

CMT is displayed in Microsoft Visio 2003. It is too large to be contained on a single Visio page so there are three separate diagrams. The first covers the ATO cycle up to JIPTL dissemination, the second from the JIPTL to execution of the ATO and the third covers Dynamic Targeting and Ad-Hoc collections. The three Visios are referred to as the JIPTL Visio, ATO Visio, and TST Visio.

The activities are presented semi-chronologically in the diagrams with time from JIPTL Visio through ATO Visio flowing from left to right. Although the chronological sequence represented in the diagram is correct, the diagrams do not reflect a uniform time scale. The DT processes depicted in the third diagram have no associated times. They are not in temporal sequence with the other two diagrams, essentially operating apart, although linked to the ATO cycle. The dynamic processes operate continuously, injecting targets and collections into the ATO cycle as required and allowed.

The rectangular boxes (activity blocks) in the diagrams represent activities performed by the organizations, the diamonds (decision blocks) are decision points, and the rounded rectangles (information blocks) are information termination or transfer points. Information flow is represented by arrows between activity blocks and through use of information blocks. The following are block examples from CMT:

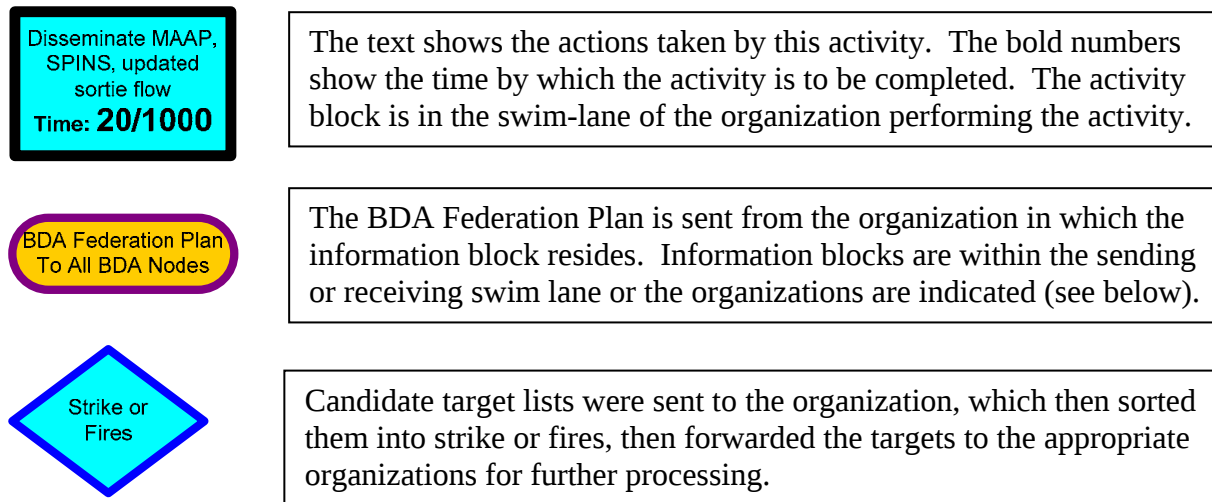


Figure 3. Examples of activity, information, and decision blocks.

5.3 Architecture Structure

Figures 4 and 5 show small portions of the JIPTL and ATO Visios, respectively. More complete descriptions of architecture structure are presented later in this section.

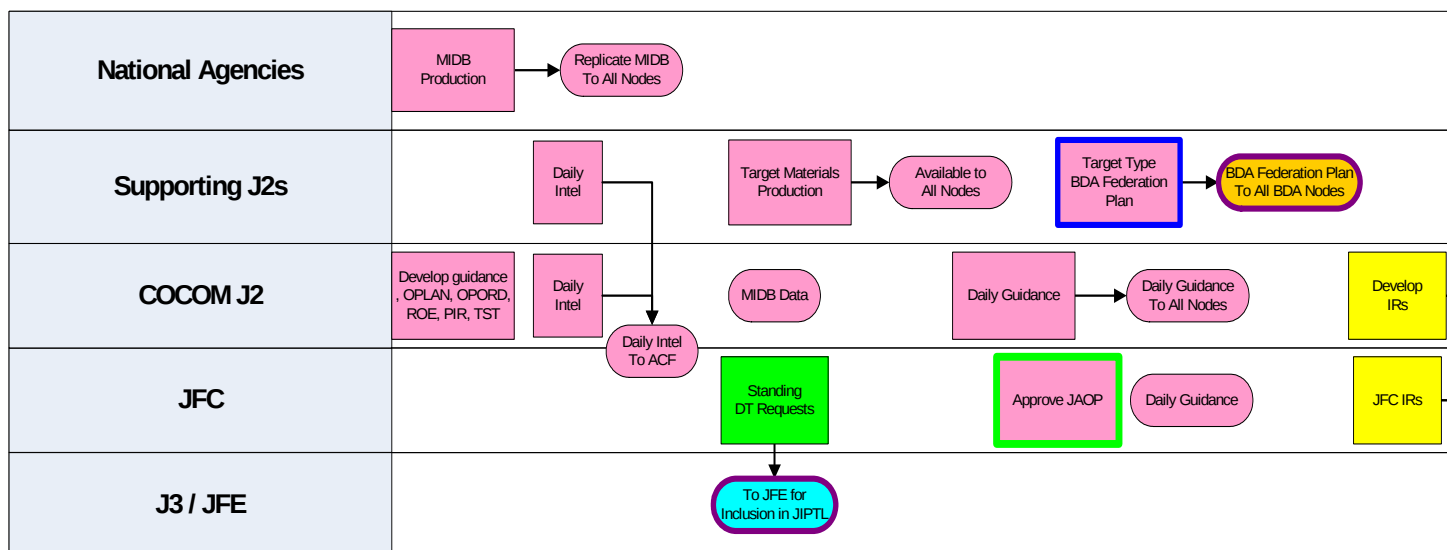


Figure 4. Portion of the JIPTL Visio, showing some higher-level organization's activities.

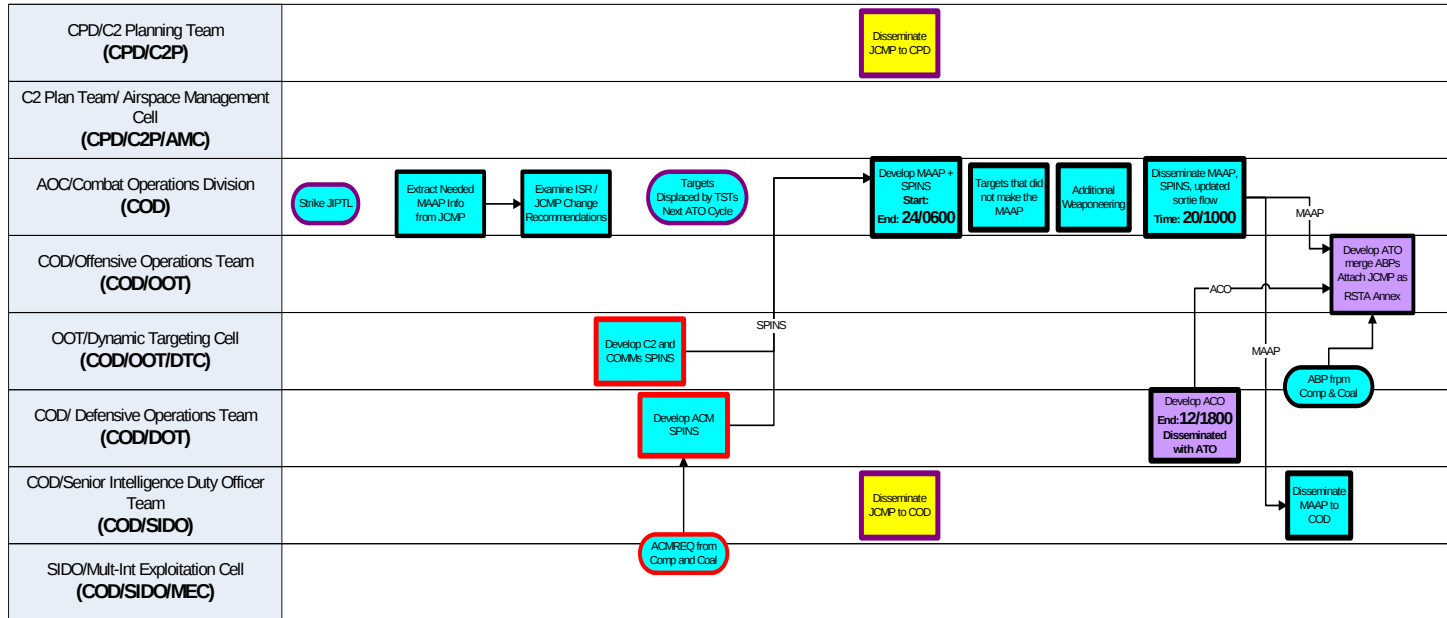


Figure 5. Portion of the ATO Visio, showing some AOC Combat Plans Division activities.

Those products/actions whose occurrences within the ATO cycle are defined to occur at specified times are indicated by bold numbers in the activity block. This is seen in Figure 5 for the COD's Develop MAAP activity. The time there is shown as 24/0600. This means that completion of MAAP development is to occur at 24 hours before the beginning of ATO execution, at 0600. The times are often cutoff times with respect to the formulation or dissemination of lists of targets. Activity blocks with no indicated times may occur continuously or are intermediate steps to a timed deliverable but they have no specific deadlines.

Information flow between activities in the diagrams is often indicated by arrows. In many cases the information content is indicated by a label on the arrow. In other cases the content is obvious from the activity that produces the information.

The information development activities shown at the left edge of the JIPTL Visio are generally developed long before the commencement of hostilities and are often modified to fit the situation as a crisis situation becomes imminent. The original development activities are not included in the model, rather there is a single activity block to show that the information is produced. Only some of the modification activities are shown. Updates to information are not shown other than for the ATO and its RSTA Annex.

Other time related factors: Many activities are carried out almost continuously and this cannot be represented. The only place this is indicated is in the JIPTL Visio where there is one long Targeting block. Activities can begin before needed information, or all of the information, is available. Information is often delivered to an organization before an activity that uses it begins. For this reason, information is assumed to be subsequently available until the end of that ATO cycle for any activities that need it in that or subordinate swim-lanes.

The reference documents are often not specific, or at least all inclusive, about where the outputs from various cells, Teams, and Divisions are distributed. This is in part due to the trend to post information to web sites or on system servers (e.g. PRISM) where information is pulled by many of those organizations that need it. In the Visio diagrams the information flow shown is often only to the organization which will process the information next and to AOC Divisions.

An additional important point with regard to the data input is that many of these data are continuously, or periodically, updated. It is assumed that these updates are disseminated/pulled, as available, and that each organization is working with the latest accessible versions of the required input data. These data updates are not represented in the Visio Diagram.

Architecture Diagram Explanations

Following are explanations of the several conventions used in the Visio architecture diagrams.

Swim-Lanes

Activity performing organizations are shown on the left of each Vision diagram with each having its own swim lane. They are segmented into organization groupings that are separated using solid and dashed lines. Heavy solid lines separate major organizations, followed by heavy and light dashed lines for lower-level groupings:

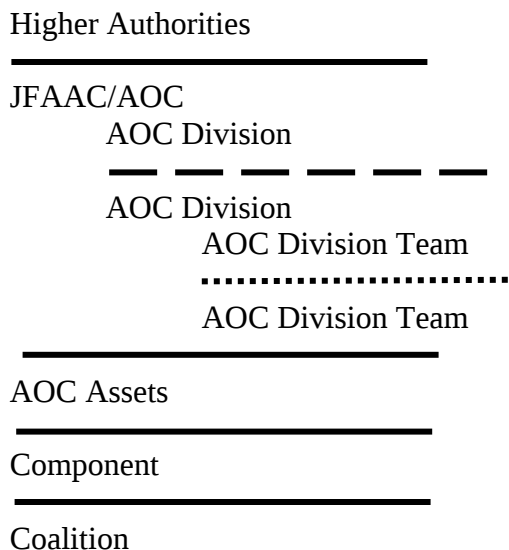


Figure 6. Organization groupings indicated by solid and dashed lines.

Section 4 lists the AOC Divisions, Teams, and Cells. The higher-authority, component, and coalition subordinate organizations are listed in the beginning of this section.

Each swim-lane heading contains the title of the organization and, in parentheses and bold, the code for that organization. These codes are used throughout all Visios and spreadsheets when referring to an organization.

5.4 Activity Blocks and Process Flow

Activities are shown by activity blocks using the color-code scheme described in Section 3. The activity is performed by the organization in whose swim-lane the block resides. There are many tasks that are performed within each block. These are not shown. The collection and targeting processes are broken down only as far as needed to fully represent them and their interactions. The breakdown is taken to the major activity level with no attempt made to represent every sub-task that is performed. The following figure shows how to read activity performance and information flow.

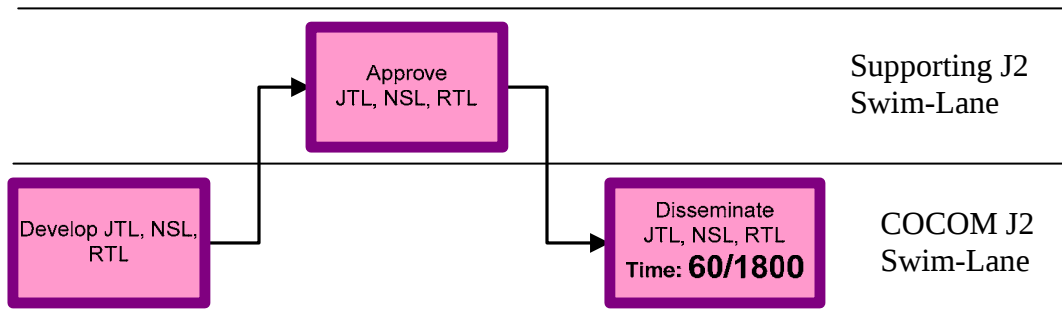


Figure 7. Target lists example activity flow.

The COCOM J2 develops the target lists and forwards them to a supporting J2 (Joint Staff J2) for approval. The approved list is sent back to the COCOM J2, which then disseminates the list to requiring organizations. The list is to be forwarded by 1800, which is 60 hours from the beginning of executing this-cycle ATO.

Information Blocks

Developing information during the execution of operational activities and passing that information to subsequent activities for their execution is central to operations. Representing that information flow is central to an operations architecture. The use of information blocks is a major component in constructing an uncluttered architecture. They are used in place of having to have an unwieldy number of information transfer lines. They are used for:

- Forwarding information to an organization for later use.
- Direct transfer of information between activities.
- Forward information from one Visio diagram to the next.
- Information transfer to an organization for distribution within that organization.

Examples are presented below.

Information blocks commonly contain organization codes for where from/to. The first example does not, for the reason stated.

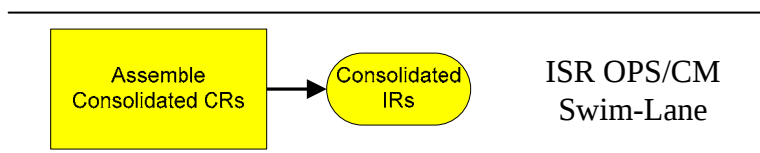


Figure 8. Example of information block utilization, forwarding for later use.

Figure 8 shows a case where the information goes to the same organization that developed it for later use in another activity. This type of information transfer representation is used mainly for transfer between Visio charts. Because the information block is in the swim-lane where the information was generated and where it will be used, it contains no organization codes.

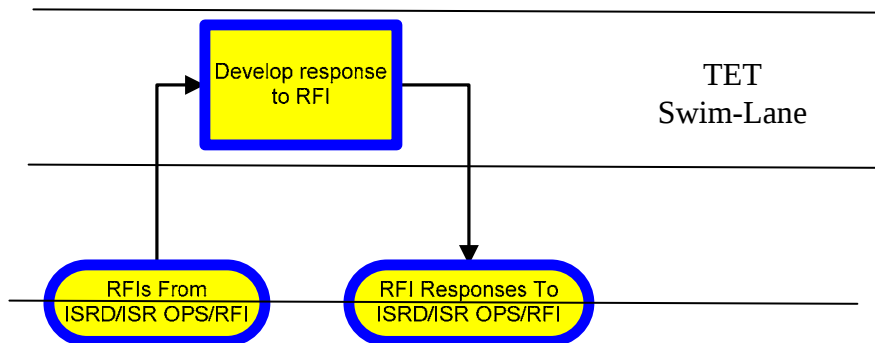


Figure 9. Information block example, information transfer between activities.

Figure 9 shows use of information blocks for direct transfer between activities. Note that the blocks are on a line between swim-lanes, not in a swim-lane. Thus, it is necessary to indicate within the information blocks from and to where they are sent. Figure 10 shows another example of this type of use.

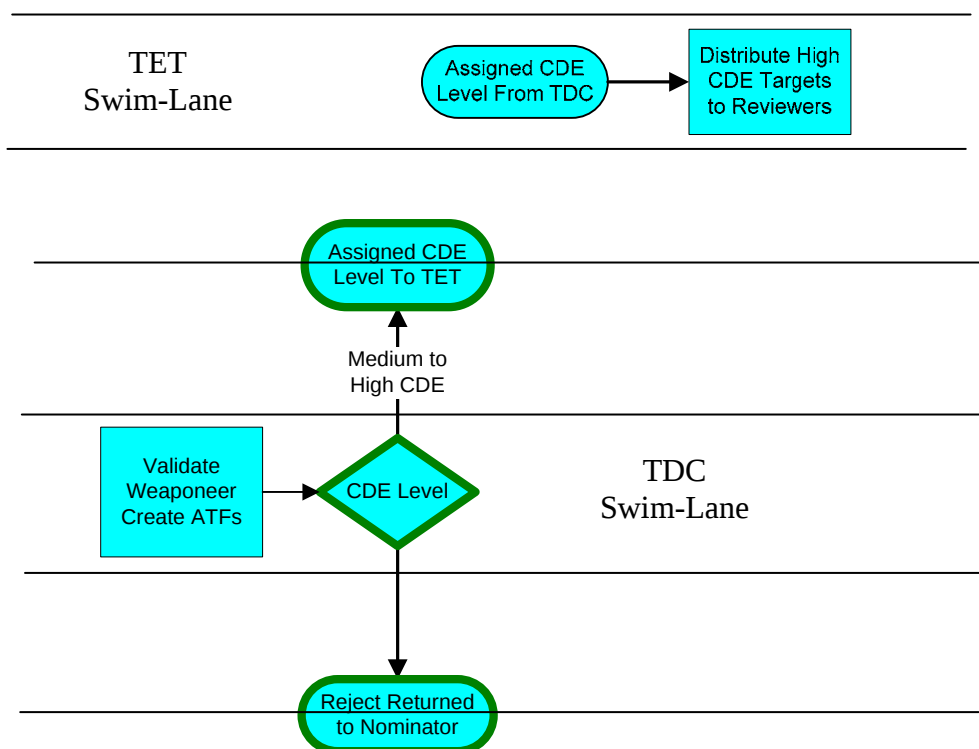


Figure 10. Information block example, information transfer between activities.

Figure 10 shows a case where the sending information block is not in a swim-land but the received information block is. Both contain organization codes.

Because the DT Visio is parallel in time with the ATO Visio, and to a lesser extent with the JIPTL Visio, there is considerable use of information blocks for information transfer between them. Figure 11 is an illustration of this.

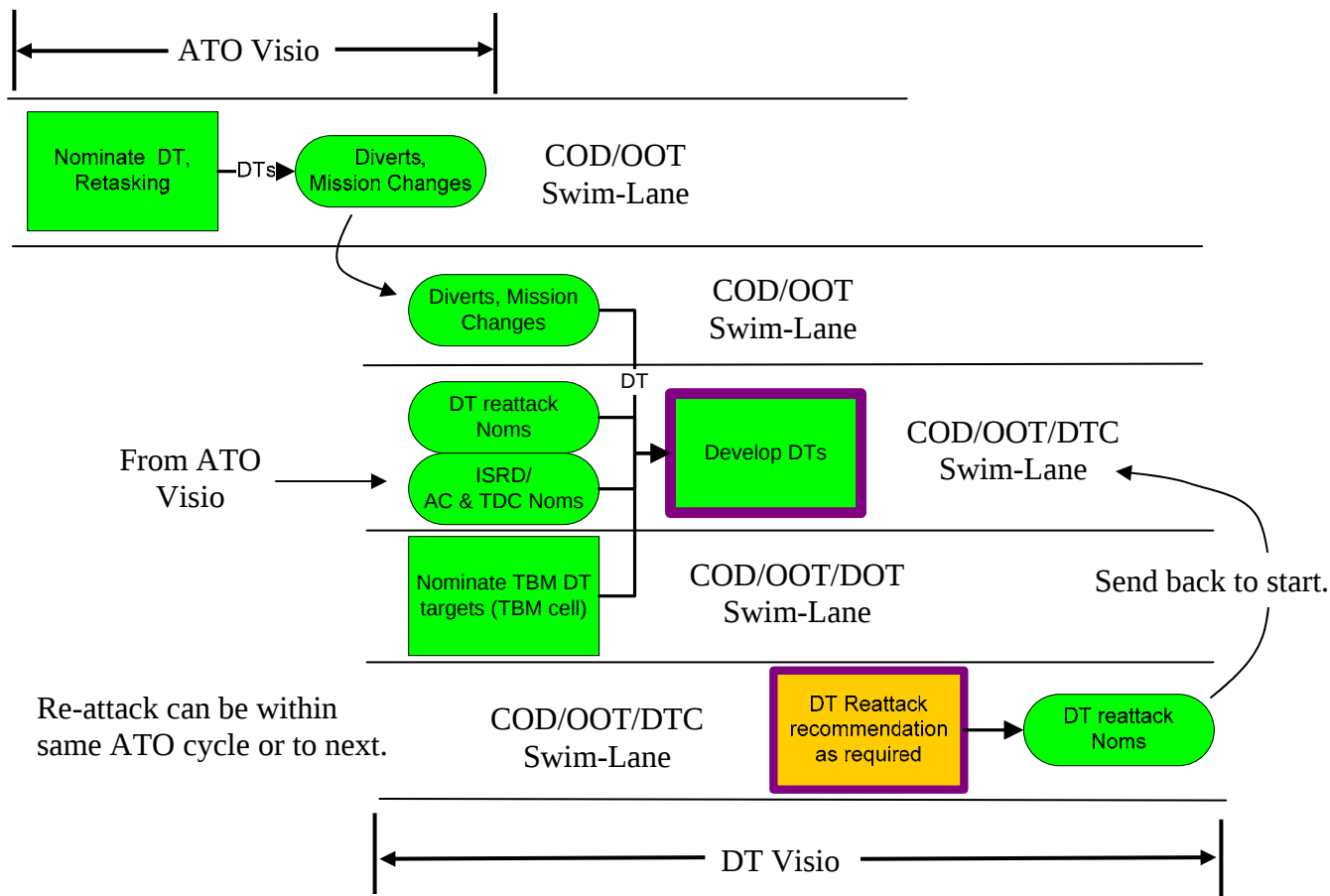


Figure 11. Use of information blocks between and within a Visio diagram.

Note the offset of the same swim-lanes in Figure 11. This is due to not being able to align two inserts from Visio in Word. The figure shows the following information exchanges:

- COD/OOT diverts and mission changes sent from the ATO Visio. There is no organization indicated in the information block because the swim lane is the same.
- COD/OOT/DTC makes re-attack nominations after BDA. Information is within the same swim-lane on the DT Visio.
- ISR/ACF/AC and ISR/TGT/CA/TDC send DT nominations from the ATO Visio. Note that a shortened acronym for the Cell is used in the information block.

- COD/OOT/DOT makes DT nominations for TBMs and sends to DTC, no information block is required, direct information transfer using arrow on Visio.

The DT re-attack nomination was developed and used after evaluation of the results from the initial attack. This is an illustration of the fact that the dynamic processes are going on nearly continually so the DT Visio does not have a consistent left-to-right time flow.

5.5 Information Distribution and Availability

It is not possible to show all information transfers and usages that occur during an ATO cycle. Thousands of arrows would be required. A convention has been adopted that shows forwarding of major information products, such as the ATO, and not all of its components. Also, the information is shown forwarded to high-level organizations and not to all of the teams and cells within them that use the information. It is assumed that:

When information is sent to an organization, it is available to all of its subordinate organizations.

The following figure illustrates these conventions.

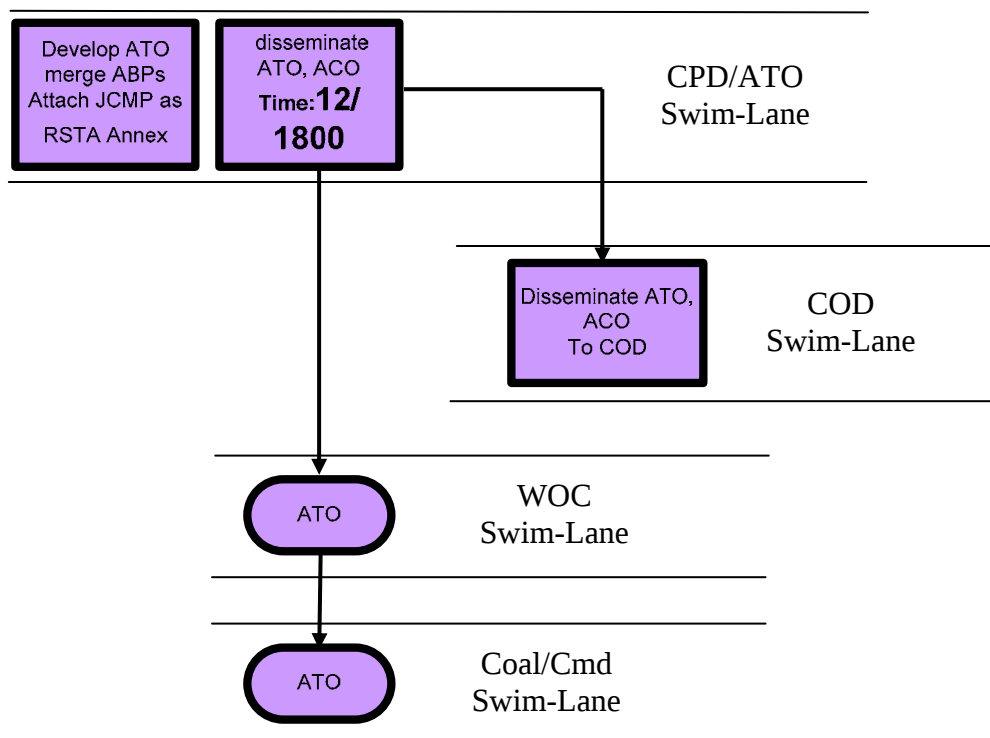


Figure 12. Distribution of information to organizations for multiple uses.

CPD/ATO develops the ATO and disseminates it to all organizations on the diagram. The block in the Combat Operations Division (COD) swim-lane specifically indicates distribution to all COD organizations. Distribution is shown in this manner because it is so indicated in the AOC documents.

Direct distribution of the ATO to WOC and to Coal/Cmd are shown using information blocks. The blocks are used because the ATO is not being delivered to a specific activity, rather being made available for any subsequent activities under that command that needs it. Again, it is assumed that WOC and Coal/Cmd make the ATO available to their subordinate organizations.

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Appendix A. Sub-Activity OV-5 Diagrams

The following Visio diagrams show two levels of CMT activities under each primary activity. The spreadsheets contain one additional activity level.

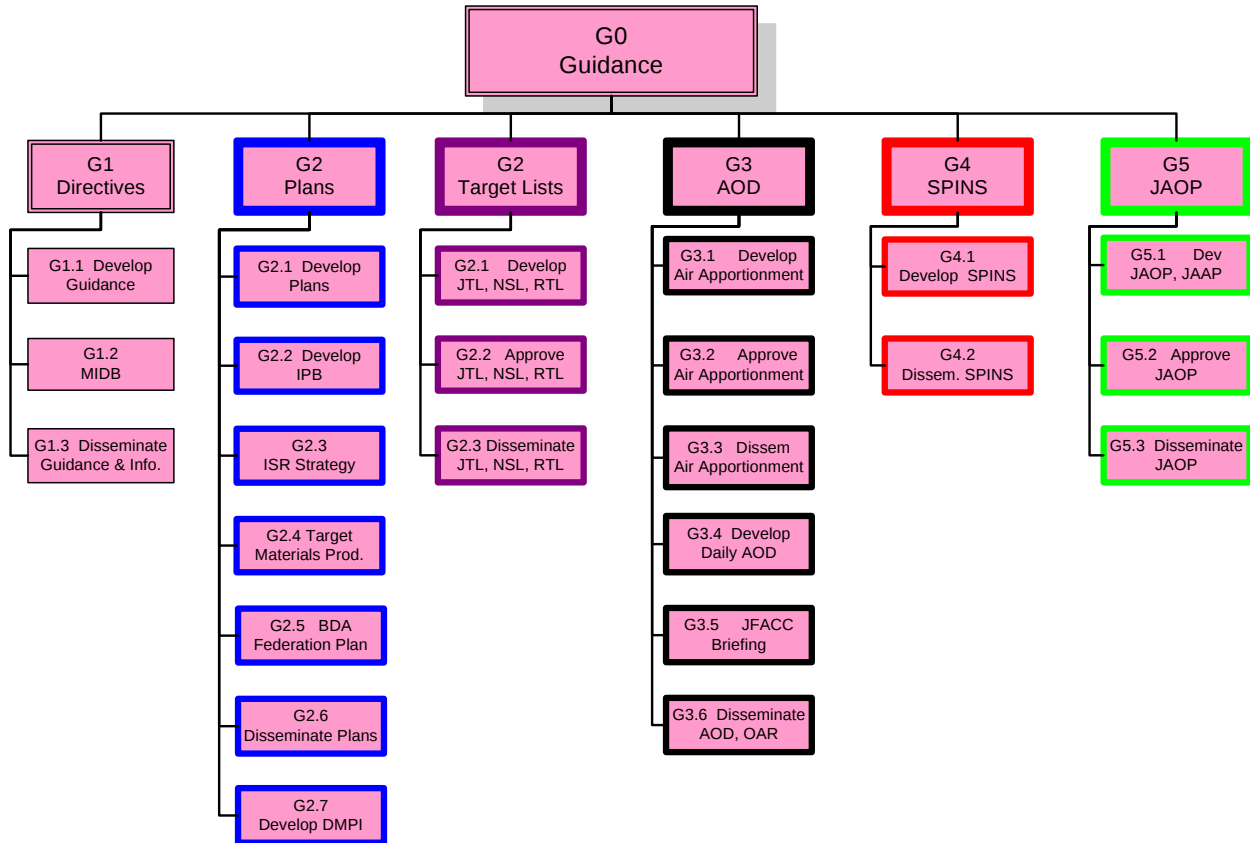


Figure A1. First two sub-activity levels under primary activity Guidance.

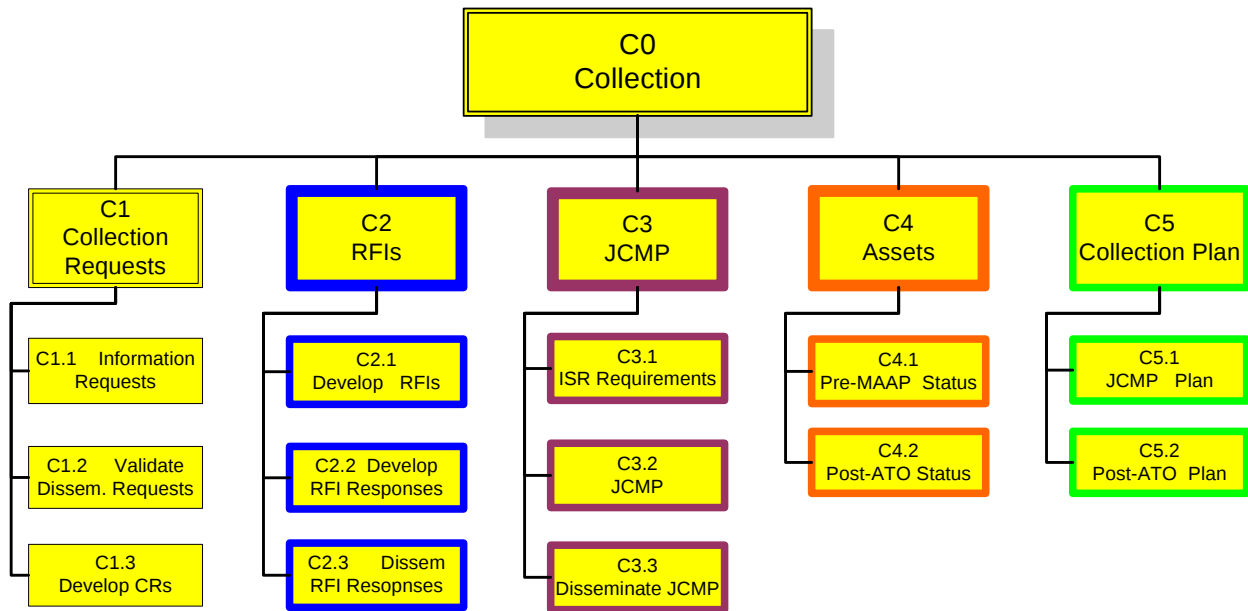


Figure A2. First two sub-activity levels under primary activity Collection.

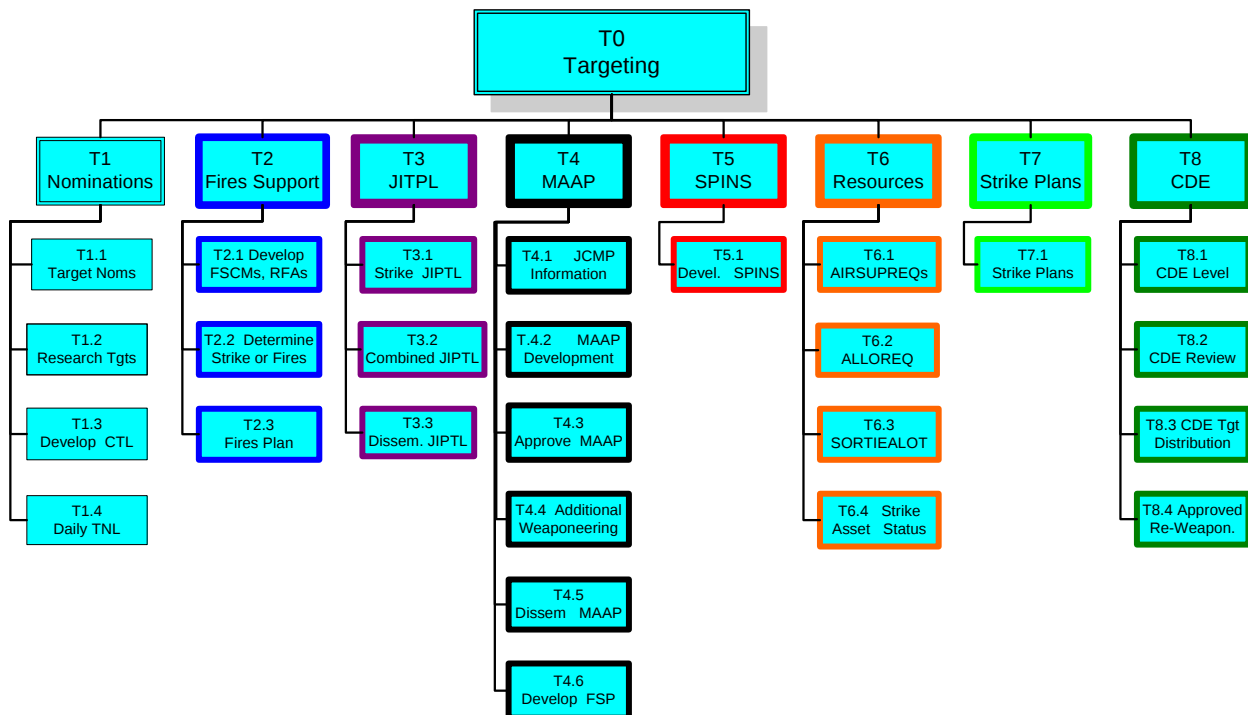


Figure A3. First two sub-activity levels under primary activity Targeting.

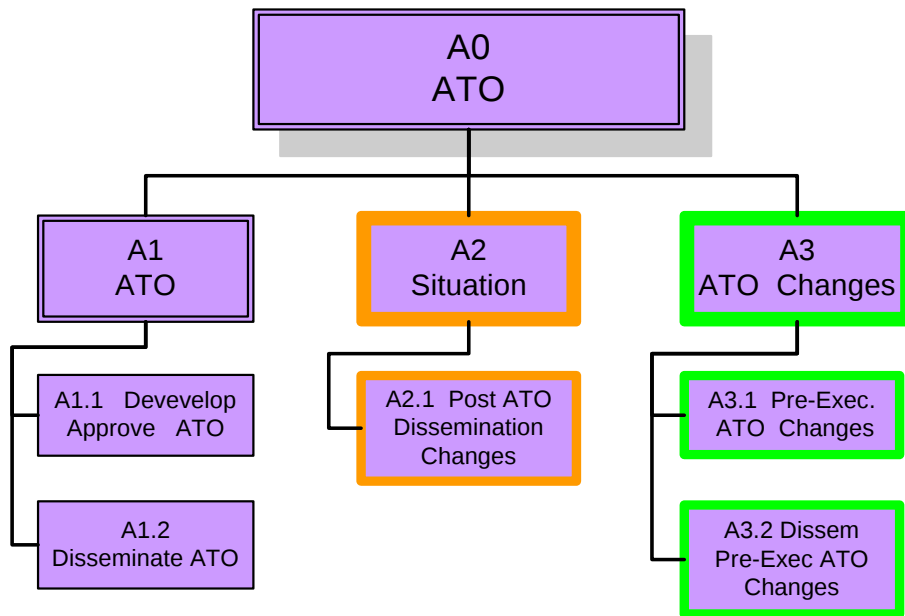


Figure A4. First two sub-activity levels under primary activity ATO.

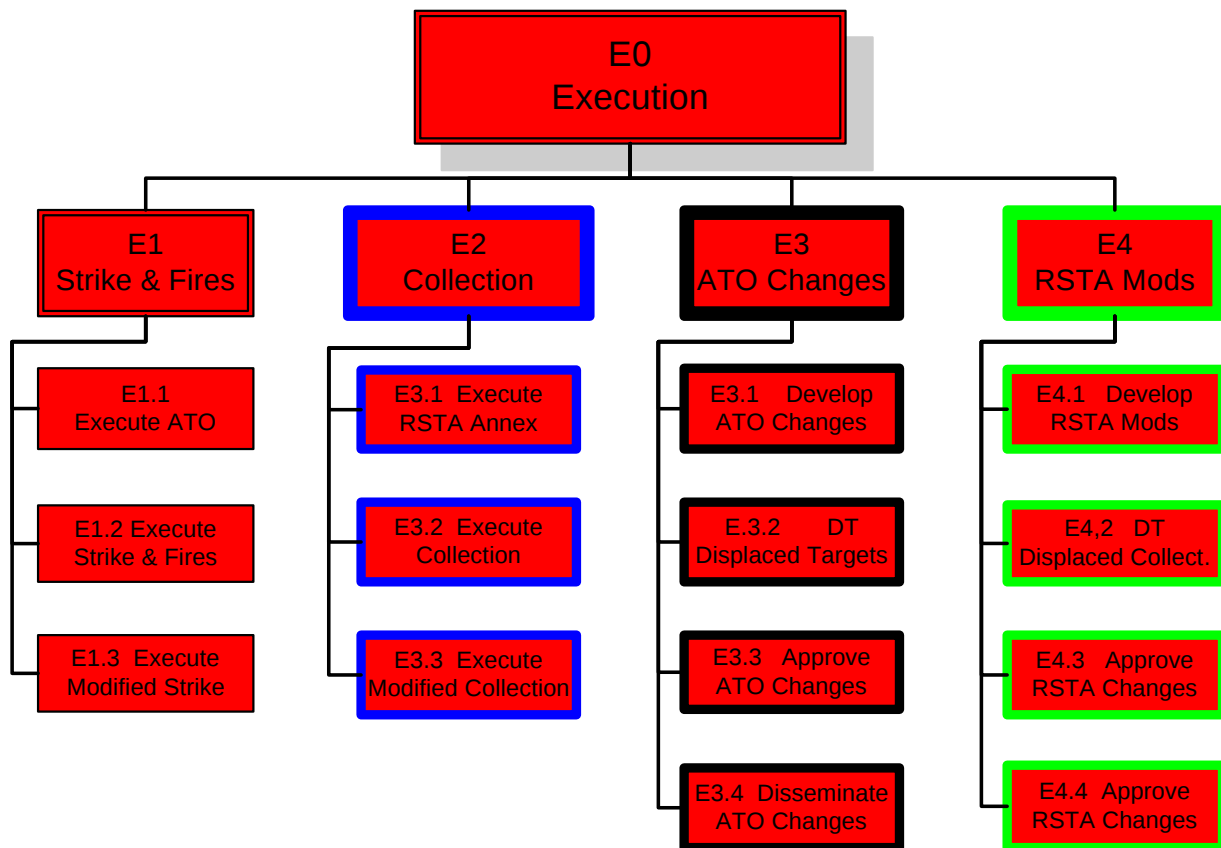


Figure A5. First two sub-activity levels under primary activity Execution.

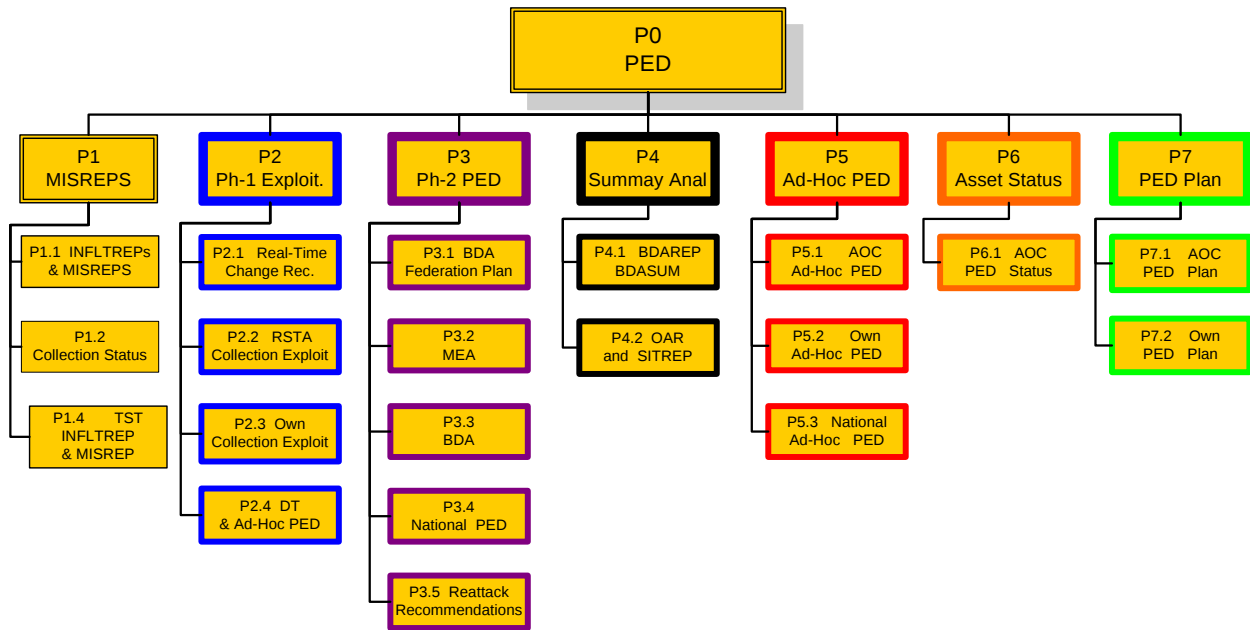


Figure A6. First two sub-activity levels under primary activity PED.

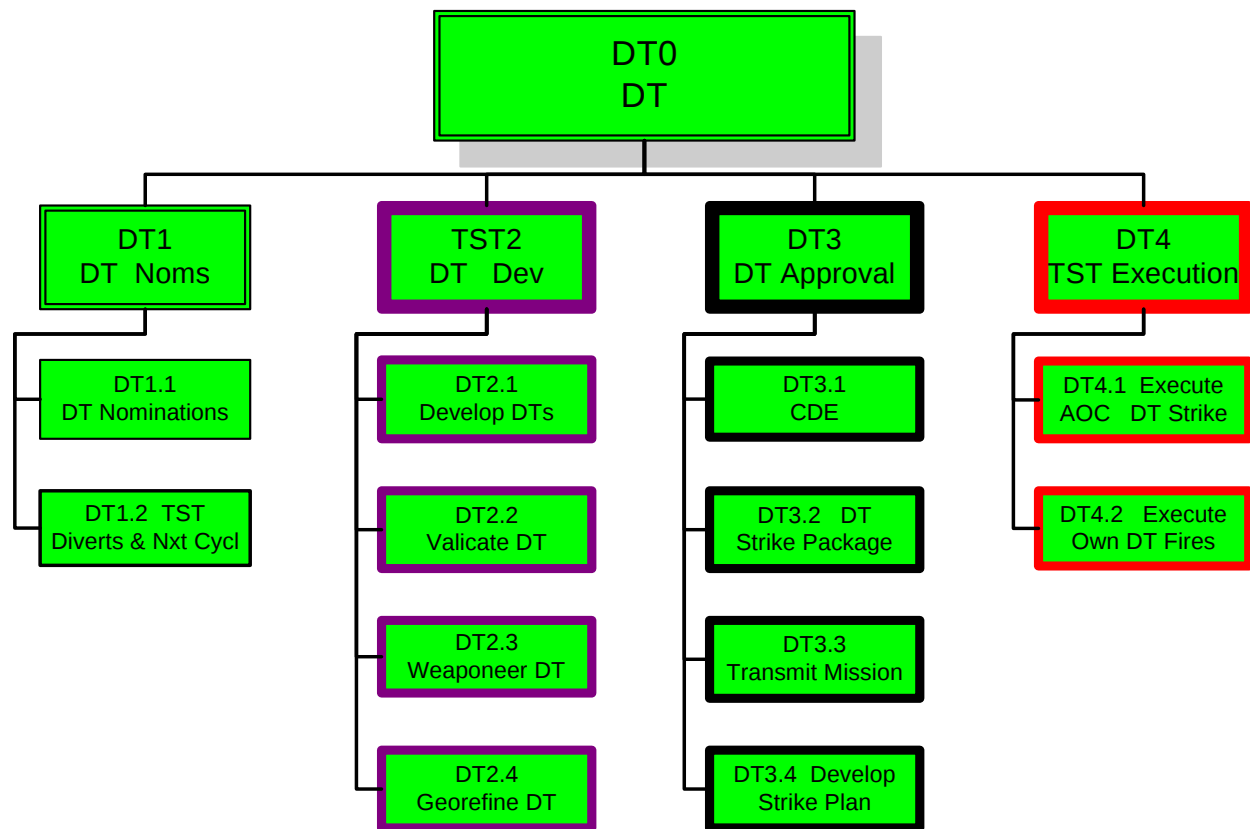


Figure A7. First two sub-activity levels under primary activity DT.

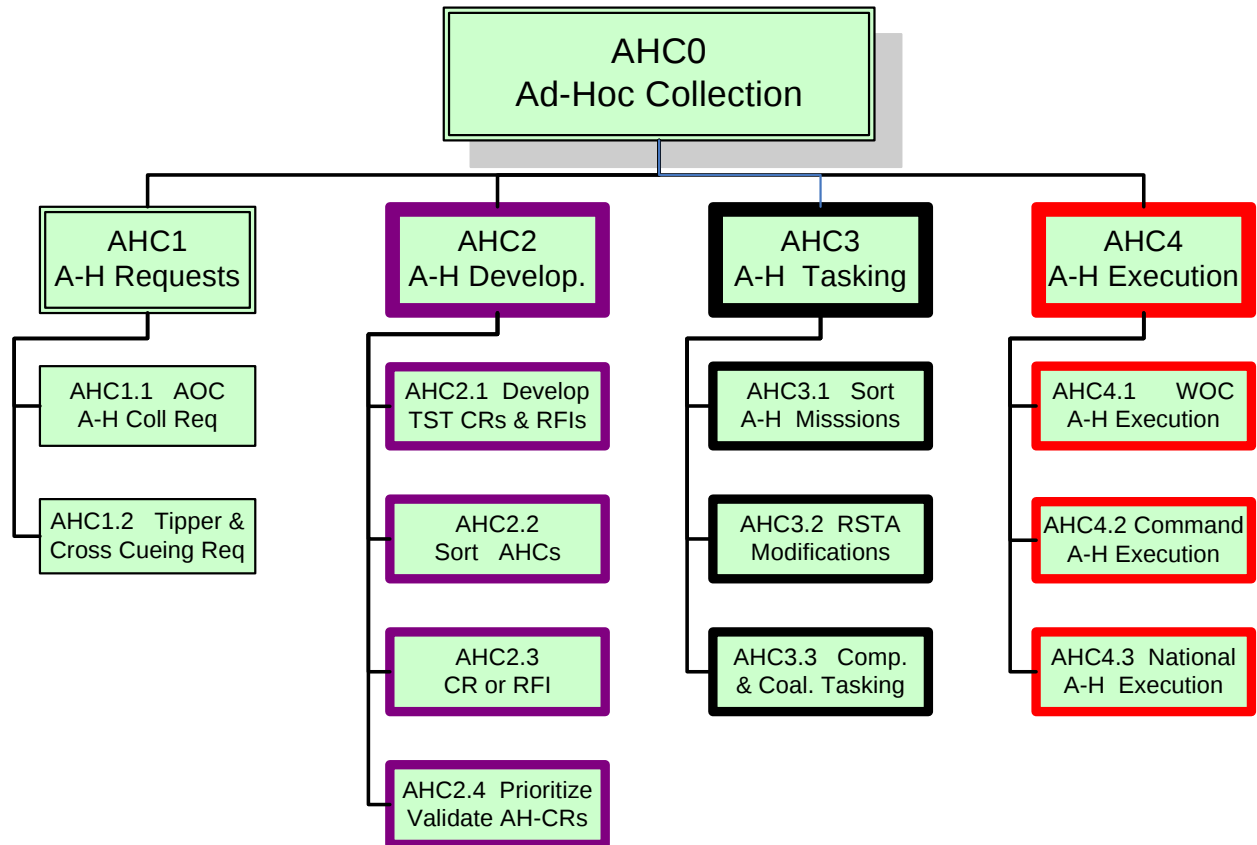


Figure A7. First two sub-activity levels under primary activity AHC.

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Appendix B. CMT Operational Activities

The following table includes all CMT operational activities, three levels deep under each activity type. Activity block body colors and outline colors are indicated.

The table shows:

- Organization performing the activity
- Information produced by the activity
- Organization to which the information is sent

Table B1. Spreadsheet of all four levels of CMT operational activities.

CMT Model - Collection Management and Targeting Activities

Level 0 (with activity block color code across spreadsheet row)

Level 1 (with block outline color code to left of the activity)

Task and Sub-Task Levels	Forward Information To
G0 – Guidance	
G1 – Directives	
G1.1 - Develop Guidance	
G1.1.1 - COCOM J2 develop guidance, OPLAN, OPORD, ROE, SD, CPD, COD, ISRD PIR, DT	
G1.1.2 - JFACC develop guidance, resources, ROE	SD, CPD, COD, ISRD
G1.1.3 - Supporting J2s develop Daily Intelligence	ISRD/ACF
G1.1.4 - COCOM J2 develop Daily Intelligence	ISRD/ACF
G1.1.5 - SD/OAT develop objectives, tasks, and MOE	SD/SPT
G1.1.6 - ISRD/ISROPS/PED develop PED guidance	SD
G1.1.7 - NCA develop national RSL/NSL guidance	COCOM J2
G1.1.8 - COCOM J2 develop daily guidance	SD, CPD, COD, ISRD
G1.2 – MIDB	
G1.2.1 – National Agencies replicate MIDB	All nodes
G1.2.2 - COCOM J2 recommend MIDB modifications	National Agencies
G1.2.3 - DIA modify MIDB	
G1.2.4 - ISRD/TGT/CA/CA maintain local MIDB	
G1.2.5 - ISRD/TGT/CA/CA distribute local MIDB	SD, CPD, COD, ISRD//TGT/CA/TDC
G1.3 - Disseminate Guidance and Information	
G1.5.1 - SD disseminate guidance and information	SD Teams and Cells
G1.5.2 - CPD disseminate guidance and information	CPD Teams and Cells
G1.5.3 - COD disseminate guidance and information	COD Teams and Cells
G1.5.4 - ISRD disseminate guidance and information	ISRD Teams and Cells
G2 – Plans	
G2.1 - Develop Plans	
G2.1.1 - SD/OAT develop OAP	SD
G2.1.2 - CPD develop task organization, C2 architecture , and comms plans.	SD

G2.1.3 - CPD/C2P/AMC develop ACP	SD, CPD, COD, ISRD
G2.2 - ISRD/ACF/AC develop IPB, INTSUMs, PIRs	SD, COD
G2.3 - ISRD/ISROPS develop ISR strategy	SD
G2.4 - Supporting J2s develop Target Materials Production	SD, CPD, COD, ISRD
G2.5 - Supporting J2s develop BDA Federation Plan	All BDA nodes
G2.6 - Disseminate Plans	
G1.5.1 - SD disseminate plans	SD Teams and Cells
G1.5.2 - CPD disseminate plans	CPD Teams and Cells
G1.5.3 - COD disseminate plans	COD Teams and Cells
G1.5.4 - ISRD disseminate plans	ISRD Teams and Cells
G2.7 - CPD/MAAP develop DMPI capability estimate	CPD/TET
G2 - Target Lists	
G2.1 - COCOM J2 develop JTL, NSL, RTL	Supporting J2s and National Agencies
G2.2 - Approve JTL, NSL, RTL	
G2.2.1 – Supporting J2s approve JTL, NSL, RTL	COCOM J2
G2.2.2 - National Agencies approve JTL, NSL, RTL	COCOM J2
G2.3 - Disseminate JTL, NSL, RTL	
G2.3.1 - COCOM J2 deliver JTL, NSL, RTL	CPD, COD, ISRD/TGT/CA/TDC
G2.3.2 - CPD disseminate JTL, NSL, RTL, FSCM	CPD Teams and Cells
G2.3.3 - COD disseminate JTL, NSL, RTL, FSCM	COD Teams and Cells
G3 – AOD	
G3.1 - Develop daily air apportionment plan	
G3.1.1 - SD/SGT conduct AOD development meeting	SD/SGT
G3.1.2 - CPD/TET develop air apportionment recommendation	SD/SGT
G3.1.3 - SD/SGT develop air apportionment recommendation	SD/SPT
G3.1.4 - SD/SPT develop daily air apportionment plan	JFAAC
G3.2 - Approve air apportionment	
G3.2.1 - JFAAC nominate air apportionment	JFC
G3.2.2 - JFC approve air apportionment	SD/SPT
G3.3 – SD/SPT disseminate air apportionment	SD/SGT
G3.4 – SD/SGT develop daily AOD	JFAAC
G3.5 - JFAAC strategy and assessment briefing, approve AOD	SD/SGT
G3.6 - Disseminate AOD, OAR	
G3.6.1 - SD/SGT deliver AOD, OAR	CPD, COD, ISRD
G3.6.2 - CPD disseminate AOD, OAR	CPD Teams and Cells
G3.6.3 - COD disseminate AOD, OAR	COD Teams and Cells
G3.6.2 - ISRD disseminate AOD, OAR	ISRD Teams and Cells
G4 – SPINS	
G4.1 - Develop SPINS	
G4.1.1 - SD/SPT develop ROE SPINS	CPD
G4.1.2 - SD/SGT develop guidance and intent SPINS	CPD
G4.2 - CPD disseminate SPINS	CPD Teams and Cells
G5 – JAOP	
G5.1 – SD/SPT develop JAOP and JAAP	JFAAC
G5.2 - Approve JAOP	
G5.2.1 - JFAAC approve JAOP	JFC

G5.2.2 - JFC approve JAOP	SD/SPT
G5.3 - Disseminate JAOP	
G5.3.1 - SD/SPT disseminate approved JAOP	CPD, COD, ISRD
G5.3.2 - CPD disseminate approved JAOP	CPD Teams and Cells
G5.3.3 - COD disseminate approved JAOP	COD Teams and Cells
G5.3.4 - ISRD disseminate approved JAOP	ISRD Teams and Cells
C0 – Collection	
C1 - Collection Requests	
C1.1 - Information Requests	
C1.1.1 - ISRD/ACF/AC develop initial information requests	COCOM J2
C1.1.2 - Comp/Cmd develop initial information requests	Comp/Cmd
C1.1.3 - Comp/Cmd decide own assets cannot handle information request	COCOM J2
C1.1.4 - Comp/Cmd decide own assets can handle information request	Comp/ISR
C1.1.5 - Coal/Cmd develop initial information requests	Coal/Cmd
C1.1.6 - Coal/Cmd decide own assets cannot handle information request	COCOM J2
C1.1.7 - Coal/Cmd decide own assets can handle information request	Coal/ISR
C1.1.8 - JFC develop initial information requests	COCOM J2
C1.1.9 - COCOM J2 develop initial information requests	COCOM J2
C1.1.10 - COCOM J2 compare IRs to PIRs, CCIR	COCOM J2
C1.1.11 - COCOM forward approved initial IRs	ISRD/ACF/AC, Comp/Cmd, Coal/Cmd
C1.2 - Validate and disseminate Information requests	
C1.2.1 - ISRD/ACF/AC form initial CPCL	
C1.2.2 - Comp/Cmd finalize Component IRs	ISRD/ACF/USC
C1.2.3 - Coal/Cmd finalize Coalition IRs	ISRD/ACF/USC
C1.2.4 - ISRD/ACF/USC validate Information requests	ISRD/ACF/AC
C1.2.5 - ISRD/ACF/AC decide they cannot answer IR as an RFI	ISRD/ISROPS/RFI
C1.2.6 - ISRD/ACF/AC decide they can answer IR as an RFI	ISRD/ACF/AC
C1.2.4 - ISRD/ISROPS/RFI decide IR is a CR	ISRD/ISROPS/RFI
C1.2.5 - ISRD/ISROPS/RFI decide IR is an RFI	COCOM J2
C1.3 - Develop Collection Requests	
C1.3.1 - SD/SGT develop Collection Requests	ISRD/ISROPS/CM
C1.3.2 - ISRD/ISROPS/ RFI Cell develop CRs from information requests	ISRD/ISROPS/CM
C1.3.3 - ISRD/TGT/CA/TDC develop target derived CRs	ISRD/ISROPS/CM
C1.3.4 - ISRD/ISROPS/CM assemble consolidated CRs	ISRD/ISROPS/CM
C1.3.5 - ISRD/ISROPS/CM identify national requirements	COCOM J2
C1.3.6 - COD/SIDO develop DT generated next-cycle CRs	ISRD/ISROPS/CM
C1.3.7 - COD/SIDO develop displaced RSTA next-cycle CRs	ISRD/ISROPS/CM
C2 - Requests for Information	
C2.1 - Develop Requests for Information	
C2.1.1 - SD/SGT develop RFIs	ISRD/ISROPS/RFI
C2.1.2 - COD/SIDO develop DT RFIs	ISRD/ISROPS/RFI

C2.1.3 - ISRD/ISROPS/RFI decide to answer IR as a CR	ISRD/ISROPS/RFI
C2.1.4 - ISRD/ISROPS/RFI decide to answer IR as an RFI	COCOM J2
C2.2 - Develop RFI Responses	
C2.2.1 - ISRD/ACF/AC respond to RFIs	ISRD/ISROPS/RFI
C2.2.2 - COCOM J2 develop responses to RFIs	ISRD/ISROPS/RFI
C2.3 - ISRD/ISROPS/RFI Cell disseminate RFI responses	SD/SGT, Comp/Cmd, Coal/Cmd
C3 – JCMP	
C3.1 - Develop ISR Requirements	
C3.1.1 - ISRD/ISROPS/CM develop daily prioritized consolidated CR list (CPCL)	COCOM J2
C3.1.2 - COCOM J2 develop ISR collect. requirements (JIPCL)	JCWG
C3.1.3 - COCOM J2 develop ISR orbits and on-station times	JCWG
C3.1.4 - COCOM J2 develop ISR collection deck	JCWG
C3.1.5 - COCOM J2 develop National collection requirements	National Agencies
C3.2 – JCMP	
C3.2.1 - ISRD/ISROPS/PED develop PED portion of JCMP	ISRD/ISROPS/CM
C3.2.2 - ISRD/ISROPS/CM assemble PED and ISM portions of JCMP	JCWG
C3.2.3 - JCWG develop JCMP	JCMB
C3.2.4 - JCMB approve JCMP	JCMB
C3.3 - Disseminate JCMP	
C3.3.1 - JCMB forward JCMP	CPD, COD, ISRD/ISR OPS, WOC/ISR, Comp/Cmd, Coal/Cmd
C3.3.2 - CPD disseminate JCMP	CPD Teams and Cells
C3.3.3 - COD disseminate JCMP	COD Teams and Cells
C3.3.4 - ISRD/ISR OPS disseminate JCMP	ISRD/ISR OPS Cells
C4 - Collection Asset Status	
C4.1 - Pre-MAAP Status	
C4.1.1 - WOC/ISR determine pre-MAAP asset status	CPD/MAAP, ISRD/ISROPS/PED
C4.1.2 - Comp/ISR determine pre-MAAP asset status	CPD/MAAP, ISRD/ISROPS/PED
C4.1.3 - Coal/ISR determine pre-MAAP asset status	CPD/MAAP, ISRD/ISROPS/PED
C4.2 - Post-ATO Distribution Status	
C4.2.1 - WOC/ISR determine post-ATO distribution asset status	CPD/MAAP, CPD/C2P/AMC
C4.2.2 - Comp/ISR determine post-ATO distribution asset status	CPD/MAAP, CPD/C2P/AMC
C4.2.3 - Coal/ISR determine post-ATO distribution asset status	CPD/MAAP, CPD/C2P/AMC
C5 - Collection Plan	
C5.1 - JCMP Collection Plans	
C5.1.1 - WOC/ISR develop mission plan from JCMP	WOC/ISR
C5.1.2 - Comp/Cmd develop collection plan from JCMP and own Comp/ISR cmd ISR	
C5.1.3 - Coal/Cmd develop collection plan from JCMP and own Coal/ISR cmd ISR	Coal/ISR
C5.2 - Post-ATO changes Collection Plans	
C5.2.1 - WOC/ISR modify collection plan from ATO changes	WOC/ISR
C5.2.2 - Comp/Cmd modify collection plan from ATO changes	Comp/ISR
C5.2.3 - Coal/Cmd modify collection plan from ATO changes	Coal/ISR

T0 – Targeting

T1 - Target Nominations

T1.1 – Nominations

T1.1.1 - ISRD/TGT/CA/TDC develop target nominations	ISRD/TGT/CA/TDC
T1.1.2 - Comp/Cmd develop target nominations	Comp/Cmd
T1.1.3 - Coal/Cmd develop target nominations	Coal/Cmd
T1.1.4 - Comp/Cmd decide own Strike can handle component nomination	Comp/Strike
T1.1.5 - Comp/Cmd decide own Strike cannot handle component noms	Comp/Cmd
T1.1.6 - Coal/Cmd decide own Strike can handle coalition nomination	Coal/Strike
T1.1.7 - Coal/Cmd decide own Strike cannot handle coalition noms	Coal/Cmd
T1.1.8 - COD/OOT/DTC determine TST next ATO cycle nominations	ISRD/TGT/CA/TDC
T1.1.9 - ISRD/TGT/CA/CA reattack nominations for next ATO cycle	ISRD/TGT/CA/TDC

T1.2 - Research Targets

T1.2.1 - ISRD/ACF fuse intelligence information	ISRD/ACF/AC
T1.2.2 - ISRD/TGT/CA/TDC request clarification	ISRD/ACF/AC
T1.2.3 - ISRD/ACF/AC research targets	ISRD/TGT/CA/TDC
T1.2.4 - ISRD/TGT/CA/TDC produce PGMTDB	WOC/Strike

T1.3 - Develop Candidate Target List

T1.3.1 - JFC develop CTL and forward	JFC
T1.3.2 - JFC determine target is for Strike	ISRD/TGT/CA/TDC
T1.3.4 - ISRD/TGT/CA/TDC develop JFAAC CTL	ISRD/TGT/CA/TDC
T1.3.5 - Comp/Cmd develop CTL	Comp/Cmd
T1.3.6 - Comp/Cmd determine target is for Strike	ISRD/TGT/CA/TDC
T1.3.7 - Coal/Cmd develop CTL	Coal/Cmd
T1.3.8 - Coal/Cmd determine target is for Strike	ISRD/TGT/CA/TDC
T1.3.9 - Comp/Cmd inserted MAAP-declined targets from former cycle	ISRD/TGT/CA/TDC
T1.3.10 - Coal/Cmd inserted MAAP-declined targets from former cycle	ISRD/TGT/CA/TDC

T1.4 - Daily Target Nomination List

T1.4.1 - ISRD/TGT/CA/TDC merge CTLs	ISRD/TGT/CA/TDC
T1.4.2 - ISRD/TGT/CA/TDC validate candidate targets	ISRD/TGT/CA/TDC
T1.4.3 - ISRD/TGT/CA/TDC weaponer new candidate targets	ISRD/TGT/CA/TDC
T1.4.4 - ISRD/TGT/CA/TDC create ATF	ISRD/TGT/CA/TDC
T1.4.5 - ISRD/TGT/CA/TDC develop TNL	CPD/TET
T1.4.6 – ISRD/TGT/CA/TDC disseminate Daily TNL	CPD/TET, Comp/Cmd, Coal/Cmd

T2 – Fires Support

T2.1 - Develop FSCMs and RFAs

T2.1.1 - Comp/Cmd develop FSCMs and RFAs	CPD, COD
T2.1.2 - Coal/Cmd develop FSCMs and RFAs	CPD, COD

T2.2 - Determine if Strike or Fires

T2.2.1 - JFC determine target is for Fires Support	J3/JFE
T2.2.2 - Comp/Cmd determine target is for Fires Support	J3/JFE

T2.2.3 - Coal/Cmd determine target is for Fires Support	J3/JFE
T2.3 - Develop Fires Plan	
T2.3.1 - Comp/Cmd develop scheme of Fires from FSP and own Comp/Strike Fires	
T2.3.2 - Coal/Cmd develop scheme of Fires from FSP and own Coal/Strike Fires	
T3 – JIPTL	
T3.1 - Strike JIPTL	
T3.1.1 - CPD/TET develop daily Strike JIPTL	JFAAC
T3.1.2 - JFAAC approves Strike JIPTL	J3/JFE
T3.2 - Combined JIPTL	
T3.2.1 - J3/JFE develops combined JIPTL	JTCB
T3.2.2 – JTCB approves combined JIPTL	JTCB
T3.2.3 – JTCB forward Fires Support Plan	Comp/Cmd, Coal/Cmd
T3.3 - Disseminate JIPTL	
T3.3.1 – JTCB forward Strike JIPTL	CPD/TET
T3.3.2 - CPD/TET delivers Strike JIPTL	SD, COD, ISRD, CPD/MAAP
T3.3.3 - SD disseminates Strike JIPTL	SD Teams and Cells
T3.3.4 - COD disseminates Strike JIPTL	COD Teams and Cells
T3.3.5 – ISRD disseminates Strike JIPTL	ISRD Teams and Cells
T4 – MAAP	
T4.1 - JCMP Information	
T4.1.1 - CPD/MAAP extract needed information from JCMP	CPD/MAAP
T4.1.2 - CPD/MAAP make JCMP change recommendations	ISRD/ISR OPS/CM
T4.1.3 - ISRD/ISR OPS/CM modify JCMP for MAAP	CPD/MAAP
T4.2 - MAAP Development	
T5.2.1 - CPD/MAAP develop MAAP	JFAAC
T5.2.2 - CPD/MAAP list targets that did not make the MAAP	ISRD/TGT/CA/TDC, Comp/Cmd, Coal/Cmd
T4.3 - JFAAC approve MAAP	CPD/MAAP
T4.4 - CPD/MAAP perform additional weaponeering	CPD/MAAP
T4.5 - Disseminate MAAP	
T4.5.1 - CPD/MAAP Deliver MAAP, SPINS, Sortie Flow	SD, COD, ISRD, WOC/Strike, CPD/ATO, Comp/Cmd, Coal/Cmd
T4.5.2 - SD disseminate MAAP	SD Teams and Cells
T4.5.3 - COD disseminate MAAP	COD Teams and Cells
T4.5.4 - ISRD disseminate MAAP	ISRD Teams and Cells
T5.5 - Develop Fires Support Plan	
T5.5.1 - Comp/Cmd develop FSP	J3/JFE
T5.5.2 - Coal/Cmd develop FSP	J3/JFE
T5.5.3 - Comp/Cmd develop ABP	CPD/ATO
T5.5.4 - Coal/Cmd develop ABP	CPD/ATO
T5.5.5 - J3/JFE approve FSP	JFC
T5.5.6 - JFC approve FSP	Comp/Cmd. Coal/Cmd
T5 – SPINS	
T5.1 - Develop SPINS	
T5.1.1 - COD/DOT develop ACMs	CPD/C2P/AMC
T5.1.2 - Comp/Cmd develop ACMREQs	CPD/C2P/AMC

T5.1.3 - Coal/Cmd develop ACMREQs	CPD/C2P/AMC
T5.1.4 - CPD/C2P/AMC develop ACM SPINS	CPD/MAAP
T5.1.5 - CPD/C2P develop C2 and comms SPINS	CPD/MAAP

T6 – Resources

T6.1 – AIRSUPREQs	
T6.1.1 - CPD/MAAP develop AIRSUPREQs	JFAAC, Comp/Cmd, Coal/Cmd
T6.2 - ALLOREQ, Available Resources	
T6.2.1 - Comp/Cmd provide available resources, ALLOREQ	CPD/MAAP
T6.2.2 - Coal/Cmd provide available resources, ALLOREQ	CPD/MAAP
T6.2.3 - JFAAC provide available resources, ALLOREQ	CPD/MAAP
T6.3 - CPD/MAAP develop sortie flow (SORTIEALOT)	JFAAC, Comp/Cmd, Coal/Cmd
T6.4 - Strike Asset Status	
T6.4.1 - AOC/Strike report pre-MAAP strike asset status	CPD/MAAP
T6.4.2 - Comp/Strike report pre-MAAP strike asset status	CPD/MAAP
T6.4.3 - Coal/Strike report pre-MAAP strike asset status	CPD/MAAP
T6.4.4 - ATO/Strike report post-ATO distribution strike asset status	CPD/MAAP, CPD/C2P/AMC
T6.4.5 - Comp/Strike report post-ATO distribution strike asset status	CPD/MAAP, CPD/C2P/AMC
T6.4.6 - Coal/Strike report post-ATO distribution strike asset status	CPD/MAAP, CPD/C2P/AMC

T7 - Strike Plan

T7.1 - Develop Strike Plans	
T7.1.1 - WOC/Strike develop strike plan from ATO	WOC/Strike
T7.1.2 - Comp/Cmd develop strike plan from ATO and own command strike	Comp/Strike
T7.1.3 - Coal/Cmd develop strike plan from ATO and own command strike	Coal/Strike

T8 - Collateral Damage Estimate

T8.1 - CDE Level	
T8.1.1 - ISR/D/TGT/CA/TDC determine CDE level	
T8.1.2 - ISR/D/TGT/CA/TDC return CDE rejected targets	Nominator
T8.1.3 - ISR/D/TGT/CA/TDC forward high CDE targets	CPD/TET
T8.1.4 - CPD/TET forward CDE targets to appropriate review level	NCA, Supporting J2s, COCOM J2
T8.2 - CDE Review	
T8.2.1 - NCA review forwarded CDE targets	COCOM J2
T8.2.2 - Supporting J2s review forwarded CDE targets	COCOM J2
T8.2.3 - COCOM J2 review forwarded CDE targets	COCOM J2
T8.2.4 - COCOM J2 return rejected CDE targets	Nominator
T8.2.5 - COCOM J2 forward approved CDE targets	ISR/D/TGT/CA/TDC
T8.3 - ISR/D/TGT/CA/TDC Re-Weaponeer approved CDE targets	ISR/D/TGT/CA/TDC

A0 - Air Tasking Order

A1 – ATO

A1.1 - Develop and Approve ATO	
A1.1.1 - CPD/C2P/AMC develop ACO	CPD/ATO
A1.1.2 - CPD/ATO Merge ABPs and develop ATO	CPD/ATO
A1.1.3 - CPD/ATO attach JCMP as RSTA Annex	JFACC

A1.1.4 - JFAAC approve ATO	JFC
A1.1.5 - JFC approve ATO	CPD/ATO
A1.2 - Disseminate ATO	
A1.2.1 - CPD/ATO deliver ATO and ACO	National, Supporting J2s COCOM J2, SD, COD, ISRD, Comp/Cmd, Coal/Cmd, WOC/Strike, WOC/ISR
A1.2.2 - SD disseminate ATO and ACO	SD Teams and Cells
A1.2.3 - COD disseminate ATO and ACO	COD Teams and Cells
A1.2.4 - CPD/ATO disseminate ATO and ACO	CPD Teams and Cells
A1.2.5 - ISRD disseminate ATO and ACO	ISRD Teams and Cells
A2 – Situation	
A2.1 - Post-ATO Dissemination Situation Changes	
A2.1.1 - Comp/Cmd post-ATO dissemination situation/OPS changes	CPD/MAAP, CPD/C2P/AMC
A2.1.2 - Coal/Cmd post-ATO dissemination situation/OPS changes	CPD/MAAP, CPD/C2P/AMC
A2.1.3 - Comp/Cmd post-ATO dissemination Strike assets changes	CPD/MAAP, CPD/C2P/AMC
A2.1.4 - Coal/Cmd post-ATO dissemination Strike asset changes	CPD/MAAP, CPD/C2P/AMC
A2.1.5 - WOC/Strike post-ATO dissemination Strike asset changes	CPD/MAAP, CPD/C2P/AMC
A3 – ATO Changes	
A3.1 - Post ATO Distribution, Pre-Execution ATO and ACO changes	
A3.1.1 - CPD/C2P/AMC develop ACO changes	CPD/ATO
A3.1.2 - CPD/MAAP develop MAAP and ATO changes	CPD/ATO
A3.2 - Disseminate Pre-Execution ATO and ACO Changes	
A3.2.1 - CPD/ATO Team deliver ATO, ACO changes	SD, CPD, COD, ISRD, Comp/Cmd, Coal/Cmd, WOC/Strike, WOC/ISR, National, Supporting J2s, COCOM J2
A3.2.2 - SD disseminate ATO, ACO changes	SD Teams and Cells
A3.2.3 - CPD disseminate ATO, ACO changes	CPD Teams and Cells
A3.2.4 - COD disseminate ATO, ACO changes	COD Teams and Cells
A3.2.5 - ISRD disseminate ATO, ACO changes	ISRD Teams and Cells
E0 – Execution	
E1 - Execute Strike and Fires	
E1.1 - COD/OOT execute/monitor ATO	
E1.2 - Execute Strike and Fires	
E1.2.1 - WOC/Strike execute ATO strike	
E1.2.2 - Comp/Strike execute assigned ATO strike	
E1.2.3 - Coal/Strike execute assigned ATO strike	
E1.2.4 - Comp/Strike execute own Fires	
E1.2.5 - Coal/Strike execute own Fires	
E1.3 - Execute Modified Strike	
E1.3.1 - WOC/Strike execute modified ATO strike	
E1.3.2 - Comp/Strike execute modified assigned ATO strike	
E1.3.3 - Coal/Strike execute modified assigned ATO strike	

E2 - Execute Collection

E2.1 - COD/SIDO execute RSTA Annex

E2.2 - Execute Collection

E2.2.1 – WOC/ISR execute RSTA collection

E2.2.2 - Comp/ISR execute assigned RSTA collection

E2.2.3 - Coal/ISR execute assigned RSTA collection

E2.2.4 - National agency execute RSTA collection

E2.2.5 - Comp/ISR execute own collection

E2.2.6 - Coal/ISR execute own collection

E2.3 - Execute Modified Collection

E2.3.1 – WOC/ISR execute modified RSTA collection

E2.3.2 - Comp/ISR execute modified assigned RSTA collection

E2.3.3 - Coal/ISR execute modified assigned RSTA collection

E2.3.4 - Comp/ISR execute modified own collection

E2.3.5 - Coal/ISR execute modified own collection

E3 – ATO Changes

E3.1 - COD/OOT develop changes to ACO and ATO during execution COD

E3.2 - TST Displaced ATO Targets

E3.2.1 - COD/OOT/DTC identify ATO targets displaced by DT COD/OOT/DTC

E3.2.2 - COD/OOT/DTC identify displaced targets with alternate strike COD/OOT/DTC

E3.2.3 - COD/OOT/DTC ID no alternate displaced targets for next cycle CPD/MAAP

E3.2.4 - COD/OOT/DTC Chief approve altered strike for displaced targets COD/OOT/DTC

E3.2.5 - COD/OOT/DTC modify ATO for DT changes COD/OOT

E3.3 - COD approve changes to ACO and ATO during execution COD/OOT

E3.4 - ACO and ATO Changes Dissemination

E3.4.1 - COD/OOT deliver ACO and ATO changes CPD, COD, ISRD, AOC/Strike, Comp/Cmd, Coal/Cmd

E3.4.2 - CPD disseminate ACO and ATO changes CPD Teams and Cells

E3.4.3 - COD disseminate ACO and ATO changes COD Teams and Cells

E3.4.4 – ISRD disseminate ACO and ATO changes ISRD Teams and Cells

E3.4.5 - Comp/Cmd disseminate ACO and ATO changes Comp/Strike

E3.4.6 – Coal/Cmd disseminate ACO and ATO changes Coal/Strike

E4 - RSTA Annex Modifications

E4.1 - COD/SIDO develop modifications to RSTA Annex during execution COD

E4.2 - COD/OOT/DTC ID RSTA modifications by DT displaced ATO targets COD/OOT

E4.3 - COD approve modifications to RSTA Annex during execution COD/SIDO

E4.3 - RSTA Annex Modifications Dissemination

E4.4.1 – COD/SIDO deliver RSTA Annex modifications ISRD/ISROPS, AOC/ISR, Comp/Cmd, Coal/Cmd

E4.4.2 – ISRD/ISROPS disseminate RSTA Annex modifications ISRD/ISROPS Cells

E4.4.3 - Comp/Cmd disseminate RSTA Annex modifications Comp/ISR

E4.4.4 – Coal/Cmd disseminate RSTA Annex modifications Coal/ISR

P0 - Processing, Exploitation, and Dissemination

P1 - MISREPS

P1.1 - INFLTREPS and MISREPS

P1.1.1 - WOC/Strike generate INFLTREPS and MISREPS	ISRD/ACF/USC, National, COCOM J2, Supporting J2s
P1.1.2 - Comp/Strike generate INFLTREPS and MISREPS	ISRD/ACF/USC, National, COCOM J2, Support J2s, Comp/PED
P1.1.3 - Coal/Strike generate INFLTREPS and MISREPS	ISRD/ACF/USC, National, COCOM J2, Support J2s, Coal/PED

P1.2 – Real-Time Collection Status Reports

P2.1.1 - WOC/ISR report collection status	ISRD/TGT/CA/CA
P2.1.2 - Comp/ISR report collection status	Comp/Cmd
P2.1.3 - Coal/ISR report collection status	Coal/Cmd

P1.3 - DT INFLTREPS and MISREPS

P3.1.1 - WOC/Strike generate DT INFLTREPS and MISREPS	ISRD/ACF/USC
P3.1.2 - Comp/Strike generate DT INFLTREPS and MISREPS	ISRD/ACF/USC, Comp/PED
P3.1.3 - Coal/Strike generate DT INFLTREPS and MISREPS	ISRD/ACF/USC, Coal/PED

P2 - Phase-1 Exploitation

P2.1 - Real-Time Change Recommendations

P2.1.1 - Comp/Cmd develop real-time change recommendations	ISRD/TGT/CA/CA
P2.1.2 - Comp/Cmd develop real-time change recommendations	ISRD/TGT/CA/CA
P2.1.3 - ISRD/TGT/CA/CA develop real-time ATO change recommendations	COD/OOT

P2.2 - Phase-1 RSTA Collection Exploitation

P2.2.1 - ISRD/ISR OPS/MEC process and exploit RSTA collections	ISRD/TGT/CA/CA, ISRD/ACF/USC
P2.2.2 - Comp/PED process RSTA collections	ISRD/ISR OPS/MEC
P2.2.3 - Coal/PED process RSTA collections	ISRD/ISR OPS/MEC
P2.2.4 - ISRD/ISR OPS/MEC exploit Comp. and Coal. RSTA collections	COD/SIDO
P2.6.5 - ISRD/ACF/USC process INFLTREPS and MISREPS	ISRD/TGT/CA/CA
P2.6.6 - ISRD/TGT/CA/CA develop Phase-1 BDA	ISRD/TGT/CA/CA, COCOM J2

P2.3 - Phase-1 Own Collections Exploitation

P2.3.1 - Comp/PED process and exploit own command collections	Comp/PED
P2.3.2 - Coal/PED process and exploit own command collections	Coal/PED

P2.4 – Phase-1 DT and Ad-Hoc PED

P2.4.1 - ISRD/ISROPS/MEC DT nominations	COD/OOT/DTC
P2.4.2 - ISRD/ISROPS/MEC Ad-Hoc collection requests	COD/SIDO

P3 - Phase-2 PED

P3.1 - Supporting J2s develop BDA Federation plan

All BDA nodes

P3.2 - Military Effectiveness Assessment

P3.2.1 - ISRD/TGT/CA/CA forward MEA data	JFACC
P3.2.2 - JFACC develop MEA	

P3.3 – Battle Damage Assessment

P3.3.1 - Comp/PED develop own command BDA	Comp/Cmd
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P3.3.2 - Coal/PED develop own command BDA	Coal/Cmd
P3.3.3 - ISRD/TGT/CA/CA develop Phase-1 BDA	ISRD/TGT/CA/CA, COCOM J2
P3.3.4 - ISRD/TGT/CA/CA develop JFACC Phase-2 BDA	ISRD/TGT/CA/CA
P3.3.5 - Supporting J2s develop PED workflow plan	National Agencies, Supporting J2s, COCOM J2
P3.3.6 - Supporting J2s perform assigned Phase 1 & 2 PED	COCOM J2, DIA
P3.3.7 – National Agencies perform assigned Phase 1 & 2 PED	COCOM J2, DIA
P3.3.8 - COCOM J2 perform assigned Phase 1 & 2 PED	COCOM J2, DIA
P3.3.9 - DIA perform Phase-3 PED	SD/OAT
P3.3.5 - COD/OOT/DTC post DT BDA results	JADOCS, ISRD/TGT/CA/CA
P3.4 - National PED	National Agencies
P3.5 – Re-attack Recommendations	
P3.5.1 - ISRD/TGT/CA/CA develop next ATO cycle re-attack nominations	ISRD/TGT/CA/TDC
P3.5.2 - COCOM J2 develop next ATO cycle re-attack nominations	ISRD/TGT/CA/TDC
P3.5.3 - ISRD/TGT/CA/CA develop DT re-attack nominations	COD/OOT/DTC
P3.5.4 - COD/OOT/DTC develop DT re-attack nominations	COD/OOT/DTC
P4 - Summary Analysis	
P4.1 - COCOM J2 develop BDASUM and BDAREPS	SD/OAT
P4.2 - OAR and SITREP	
P4.2.1 – SD/OAT develop daily OAR and SITREP	
P4.2.2 – SD/OAT deliver daily OAR and SITREP for strategy and assessment Brief	JFAAC
P4.2.3 – SD/OAT disseminate OAR	JFC, SD, CPD,COD, ISRD
P4.2.4 - CPD disseminate OAR	CPD Teams and Cells
P4.2.5 - COD disseminate OAR	COD Teams and Cells
P4.2.6 - ISRD disseminate OAR	ISRD Teams and Cells
P5 - AD-Hoc PED	
P5.1 - AOC Ad-Hoc PED	
P5.1.1 - COD/SIDO/MEC conduct AOC Ad-Hoc PED	ISRD/TGT/CA/CA, COD/OOT/DTC
P5.1.2 - Comp/PED conduct AOC Ad-Hoc PED	COD/OOT/DTC
P5.1.3 - Coal/PED conduct AOC Ad-Hoc PED	COD/OOT/DTC
P5.2 - Own Command Ad-Hoc PED	
P5.2.1 - Comp/PED conduct own command Ad-Hoc PED	Comp/Cmd
P5.3.2 - Coal/PED conduct own command Ad-Hoc PED	Coal/Cmd
P5.3 - National Ad-Hoc PED	NGA
P6 - PED Asset Status	
P6.1 – ISRD/ISR OPS/MEC report AOC PED node status	CPD/MAAP, CPD/C2P/AMC
P7 - PED Plan	
P7.1 - AOC PED Plan	
P7.1.1 - ISRD/TGT/CA/TDC develop AOC PED requirements	ISRD/ISROPS/PED
P7.1.2 - ISRD/ISROPS/PED develop AOC PED plan	ISRD/ISROPS/PED
P7.1.3 - ISRD/ISROPS/PED modify PED plan after ATO changes	ISRD/ISROPS/PED
P7.1.4 - ISRD/ISROPS/PED modify PED plan during execution	ISRD/ISROPS/PED
P7.2 - Component and Coalition PED Plan	

P7.2.1 - Comp/Cmd develop PED plan for own command collections	Comp/PED
P7.2.2 - Coal/Cmd develop PED plan for own command collections	Coal/PED
P7.2.3 - Comp/Cmd modify PED plan after ATO changes	Comp/PED
P7.2.4 - Coal/Cmd modify PED plan after ATO changes	Coal/PED

DT0 - Time Sensitive Targeting

DT1 - DT Nominations

DT1.1 – DT Nominations

DT1.1.1 - National nominate DTs from intelligence information	COD/OOT/DTC
DT1.1.2 - Supporting J2s nominate DTs from intelligence information	COD/OOT/DTC
DT1.1.3 - COCOM J2 nominate DTs from intelligence information	COD/OOT/DTC
DT1.1.4 - COCOM J2 inserted DTs available from JIPTL	COD/OOT/DTC
DT1.1.5 - ISRD/ACF/AC develop DT nominations	COD/OOT/DTC
DT1.1.6 - ISRD/TGT/CA/TDC develop DT nominations	COD/OOT/DTC
DT1.1.7 - COD/SIDO nominate DTs	COD/OOT/DTC
DT1.1.8 - JFC standing DT requests	COD/OOT/DTC
DT1.1.9 - COD/DOT nominate TBM DT targets	COD/OOT/DTC
DT1.1.10 - Comp/Cmd nominate own command and AOC DT targets	Comp/Cmd, COD/OOT/DTC
DT1.1.11 - Coal/Cmd nominate own command AOC DT targets	Coal/Cmd, COD/OOT/DTC

DT1.2 - DT Diverts and Next Cycle Nominations

DT1.2.1 - COD/OOT nominate DT diverts	COD/OOT/DTC
DT1.2.2 - ISRD/TGT/CA/CA nominate next cycle DT	COD/OOT/DTC
DT1.2.3 - ISRD/ISROPS/MEC nominate DT re-attack	COD/OOT/DTC

DT2 - DT Development

DT2.1 - COD/OOT/DTC Develop DTs	COD/OOT/DTC
DT2.2 - Validate DTs	
DT2.2.1 - DT valid?, if not nominate for next cycle	ISRD/TGT/TDC
DT2.2.2 - DT valid?, if valid continue in DT process	COD/OOT/DTC
DT2.2.3 - Comp/Cmd develop own command Fires	Comp/Strike
DT2.2.3 - Coal/Cmd decide if own command Fires	Coal/Strike
DT2.3 - COD/OOT/DTC Weaponeer DTs	COD/OOT/DTC
DT2.4 - COD/OOT/DTC Georefine DTs	COD/OOT/DTC

DT3 - DT Approval and Tasking

DT3.1 - Collateral Damage Estimate	
DT3.1.1 - COD/OOT/DTC determine collateral damage level	COD/OOT/DTC
DT3.1.2 - COD/OOT/DTC return rejected CDE targets	Nominator
DT3.1.3 - COD/OOT/DTC send CDE targets to proper level for review	COCOM J2, Supporting J2s, NCA
DT3.1.4 - NCA review forwarded CDE targets	COCOM J2
DT3.1.5 - Supporting J2s review forwarded CDE targets	COCOM J2
DT3.1.6 - COCOM J2 review forwarded CDE targets	COCOM J2
DT3.1.7 - COCOM J2 return rejected CDE targets	Nominator
DT3.1.8 - COCOM J2 forward approved CDE targets	COD/OOT/DTC, COD/DOT
DT3.2 - COD/OOT/DTC Chief approve TST strike package	COD/DOT

DT3.3 - Transmit DT Strike Mission	
DT3.3.1 - COD/DOT transmit DT strike missions to strike assets	AOC/Strike, Comp/Cmd, Coal/Cmd
DT3.3.2 - COD/DOT transmit altered ATO Strike missions to strike assets	AOC/Strike, Comp/Cmd, Coal/Cmd
DT3.4 - Develop Strike Plan	
DT3.4.1 - Comp/Cmd merge own command and AOC DT strike	Comp/Strike
DT3.4.2 - Coal/Cmd merge own command and AOC DT strike	Coal/Strike
DT3.4.3 - Comp/Cmd modify strike plan using altered AOC DT	Comp/Strike
DT3.4.4 - Coal/Cmd modify strike plan using altered AOC DT	Coal/Strike
DT4 - DT Execution	
DT4.1 - Execute AOC DT Strike	
DT4.1.1 - WOC/Strike execute AOC DT strike	
DT4.1.2 - WOC/Strike execute altered ATO DT strike	
DT4.1.3 - Comp/Strike execute requested AOC DT strike	
DT4.1.4 - Coal/Strike execute requested AOC DT strike	
DT4.1.5 - Comp/Strike execute requested altered ATO DT strike	
DT4.1.6 - Coal/Strike execute requested altered ATO DT strike	
DT4.2 - Execute Own Command DT Fires	
DT4.2.1 - Comp/Strike execute own command DT Fires	
DT4.2.2 - Coal/Strike execute own command DT Fires	
AHC0 - Ad-Hoc Collection	
AHC1 - Ad-Hoc Collection Requests	
AHC1.1 - WOC and Higher Authority Ad-Hoc Collection Requests	
AHC1.1.1 - JFC submit Ad-Hoc collection requests	COD/SIDO
AHC1.1.2 - COCOM J2 submit Ad-Hoc collection requests	COD/SIDO
AHC1.1.3 - Supporting J2s submit Ad-Hoc collection requests	COD/SIDO
AHC1.1.4 - COD/SIDO submit Ad-Hoc collection requests	COD/SIDO
AHC1.1.5 - COD submit JCSR Ad-Hoc collection requests	COD/SIDO
AHC1.1.6 - Comp/Cmd develop Ad-Hoc collection requests	Comp/Cmd
AHC1.1.7 - Coal/Cmd develop Ad-Hoc collection requests	Coal/Cmd
AHC1.2 - Tipper and Cross-Cueing	
AHC1.2.1 - AOC/ISR identify tipper and cross-cueing Ad-Hoc collections	COD/SIDO
AHC1.2.2 - Comp/ISR identify tipper and cross-cueing Ad-Hoc collections	COD/SIDO
AHC1.2.1 - Coal/ISR identify tipper and cross-cueing Ad-Hoc collections	COD/SIDO
AHC2 - Ad-Hoc Collection Development	
AHC2.1 - COD/OOT/DTC develop CRs and RFIs for DT, including BDA	COD/SIDO
AHC2.2 - Sort Ad-Hoc Collections	
AHC1.2 - Comp/Cmd utilize own collection	Comp/ISR, Comp/PED
AHC1.3 - Comp/Cmd utilize AOC collection	COD/OOT/DTC
AHC1.5 - Coal/Cmd utilize own collection	Coal/ISR, Coal/PED
AHC1.6 - Coal/Cmd utilize AOC collection	COD/OOT/DTC
AHC2.3 - COD/SIDO decide if Ad-Hoc collection or RFI	COD/SIDO or ISRD/ISROPS/RFI
AHC2.4 - Prioritize and Validate Ad-Hoc Collections	

AHC2.3.1 - COD/SIDO process and prioritize Ad-Hoc CRs	
AHC2.3.2 - COD/SIDO validate Ad-Hoc CR	COD/SIDO
AHC2.4.3 - COD/SIDO reject Ad-Hoc CR for this cycle	ISR/ISROPS/CM
AHC3 - Ad-Hoc Collection Tasking	
AHC3.1 - COD/SIDO Sort Ad-Hoc collection missions	
AHC3.1.1 - COD/SIDO forward national Ad-Hoc collection missions	COCOM J2
AHC3.1.2 - COD/SIDO forward component & coalition Ad-Hoc missions	Comp/Cmd, Coal/Cmd
AHC3.1.1 - COD/SIDO forward AOC Ad-Hoc collection missions	COD/SIDO
AHC3.2 - RSTA Annex Collection Modification	
AHC3.2.1 - COD/SIDO determine displaced RSTA collections	COD/OOT
AHC3.2.2 - COD/SIDO determine no alternate asset for RSTA collection	ISR/ISR OPS/CM
AHC3.2.3 - COD/SIDO determine alternate asset for RSTA collection	COD/SIDO
AHC3.2.4 - COD/SIDO task alternate asset for displaced RSTA collection	WOC/ISR, Comp/Cmd, Coal/Cmd
AHC3.3 - Component and Coalition Tasking	
AHC3.3.1 - Comp/Cmd develop Ad-Hoc collection plan	Comp/ISR
AHC3.3.2 - Coal/Cmd develop Ad-Hoc collection plan	Coal/ISR
AHC3.3.3 - Comp/Cmd add alternate RSTA Ad-Hoc collection	Comp/ISR
AHC3.3.4 - Coal/Cmd add alternate RSTA Ad-Hoc collection	Coal/ISR
AHC4 - Ad-Hoc Collection Execution	
AHC4.1 - WOC Ad-Hoc Collection Execution	
AHC4.1.1 - WOC/ISR execute AOC assigned Ad-Hoc collection	
AHC4.1.2 - WOC/ISR execute RSTA alternate Ad-Hoc collection	
AHC4.2 - Component and Coalition Ad-Hoc Collection Execution	
AHC4.2.1 - Comp/ISR execute own command Ad-Hoc collection	
AHC4.2.2 - Comp/ISR execute requested AOC Ad-Hoc collection	
AHC4.2.3 - Comp/ISR execute RSTA alternate Ad-Hoc collection	
AHC4.2.4 - Coal/ISR execute own command Ad-Hoc collection	
AHC4.2.5 - Coal/ISR execute requested AOC Ad-Hoc collection	
AHC4.2.6 - Coal/ISR execute RSTA alternate Ad-Hoc collection	
AHC4.3 - National Ad-Hoc Collection Execution	

Appendix C. CMT Organizational Swim-Lane OV-5

This appendix contains the organizational swim-lane representation of the CMT architecture. The Visios are too large to be contained on a single report page and be readable. Thus, each Visio has been segmented into 6 sections, which are reproduced here along with the original, full-size diagrams. The segmentation is:

1	2
3	4
5	6

Each section contains the organizations on the left side of the diagram. Each is labeled with its Visio identification and with its segment number, e.g.
CMT ATO 3

Presented in order are the full size representation followed by the six segments.

It is important that the full representation is shown. When the Visios are segmented many of the lines connecting the activity blocks are lost. Thus, it is necessary to refer to the full diagram to identify all of the information transfers.

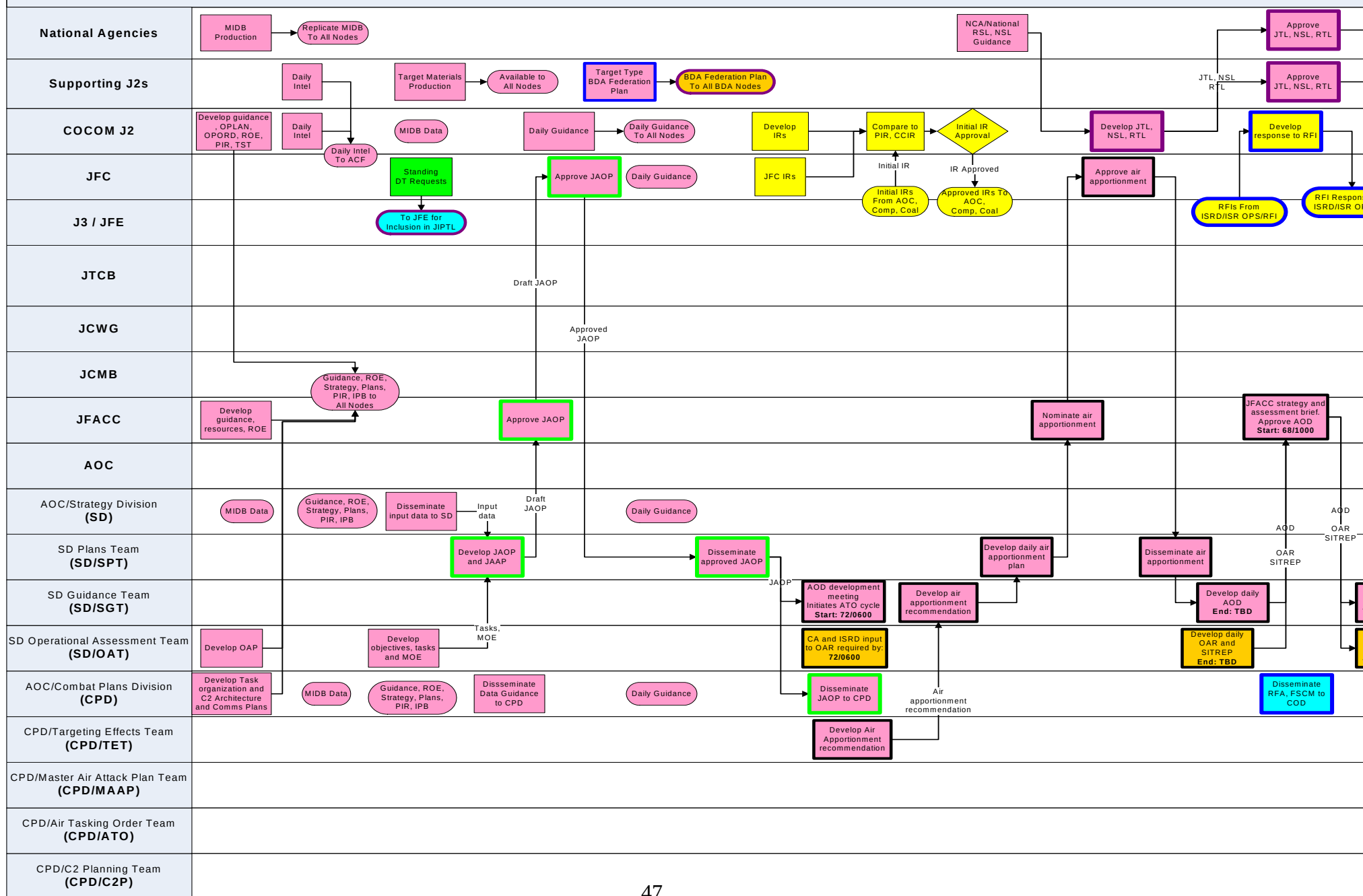
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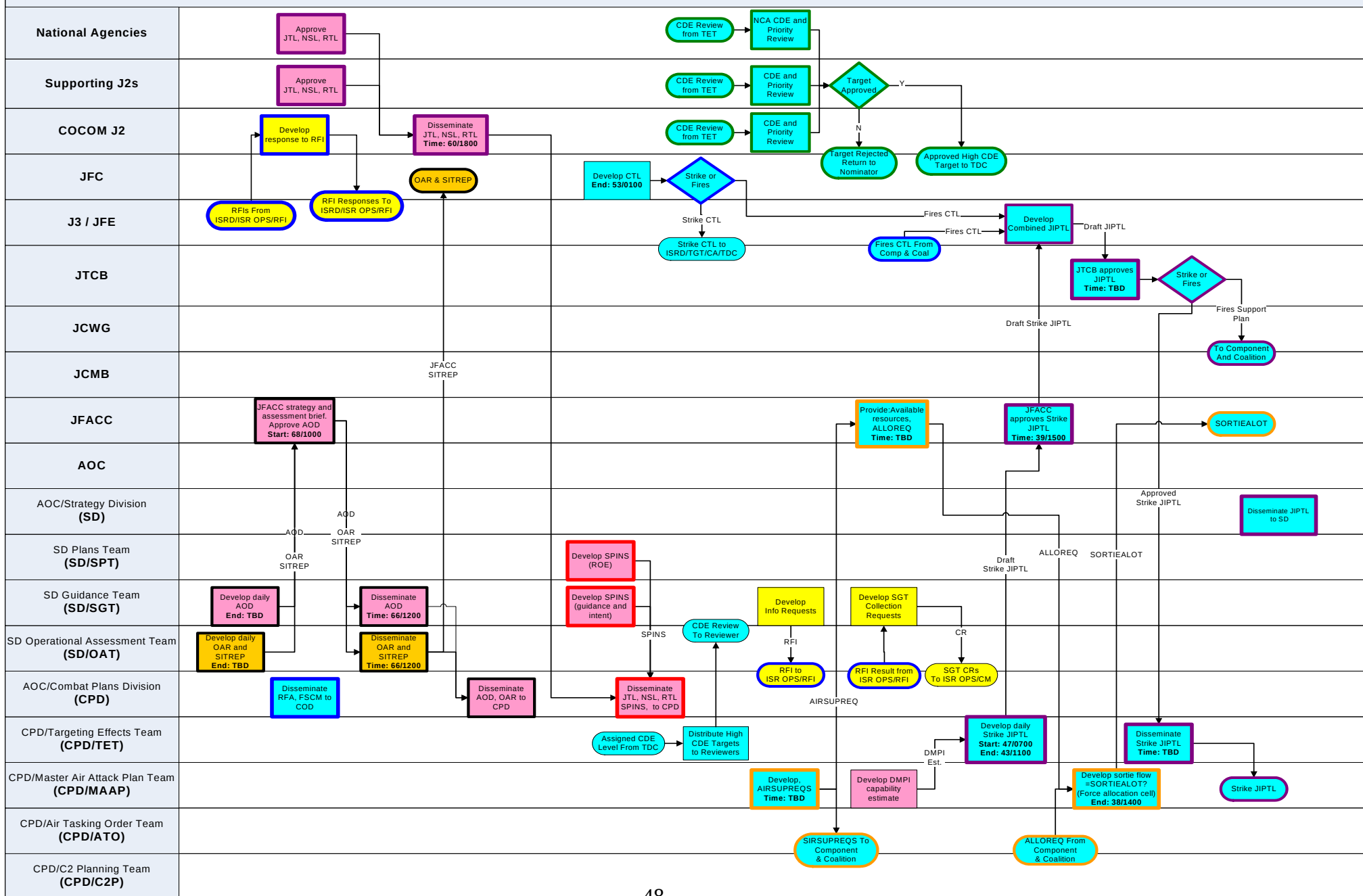
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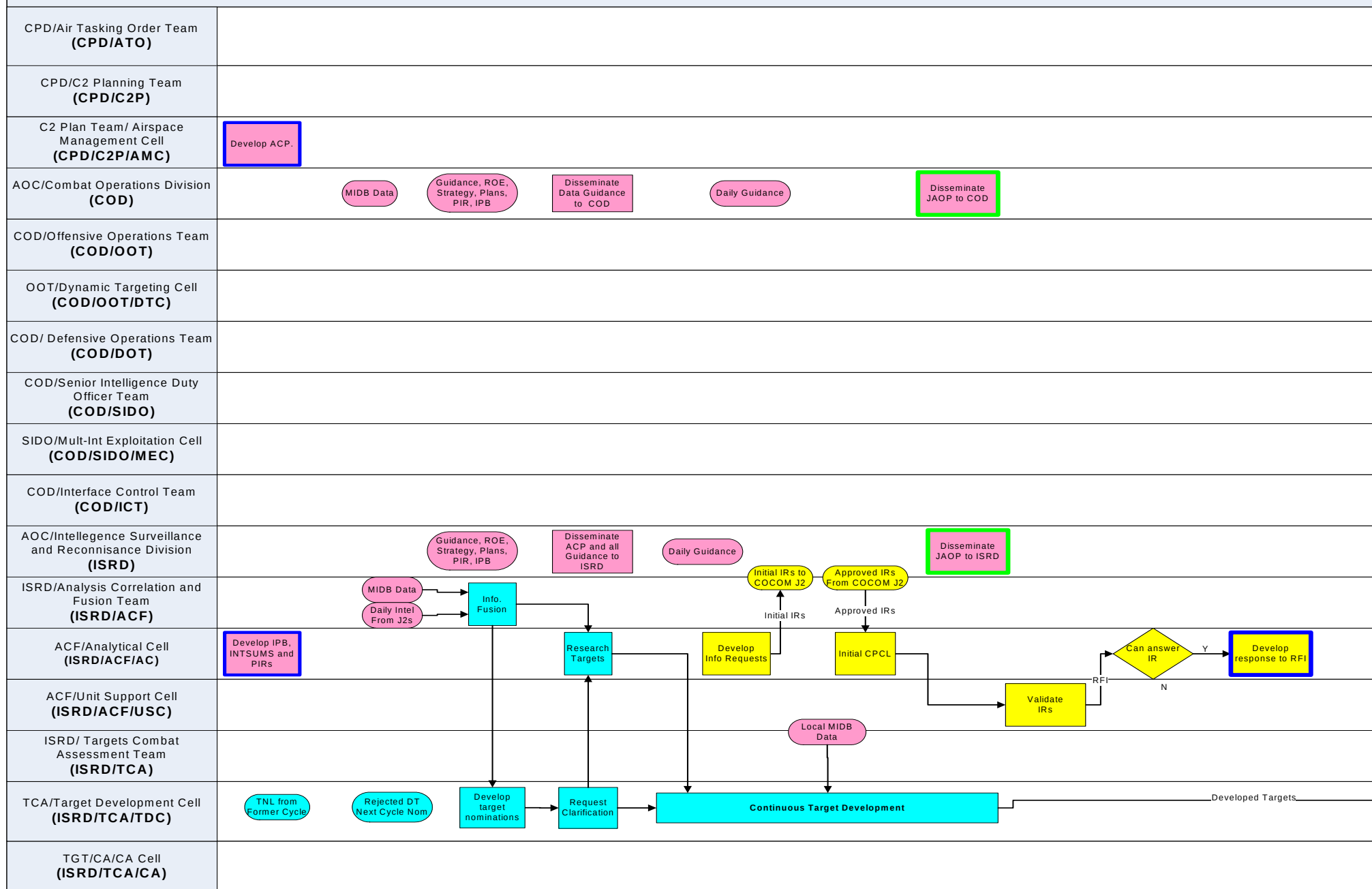
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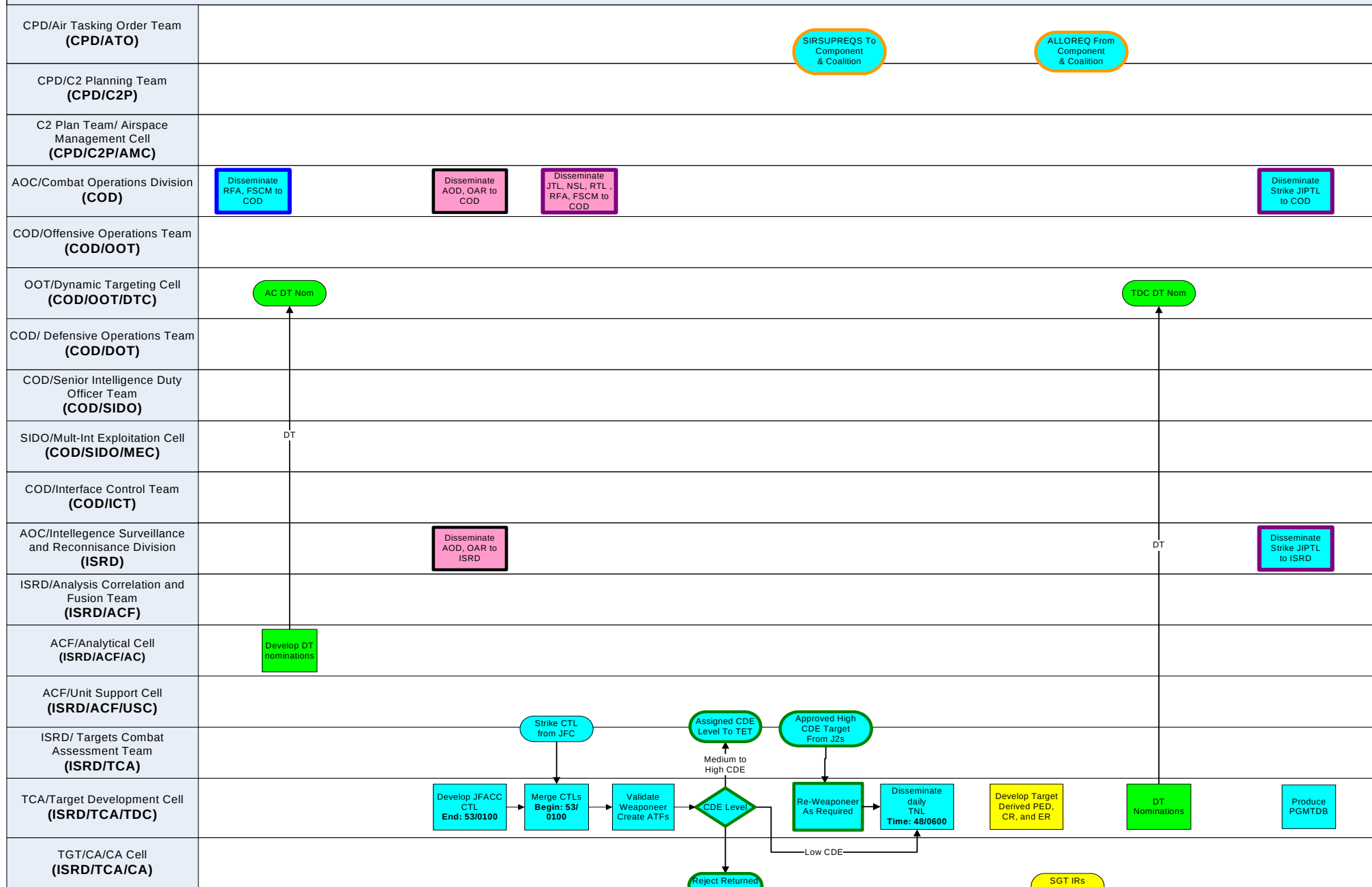
Figure C1. Segmented Visio Diagrams.

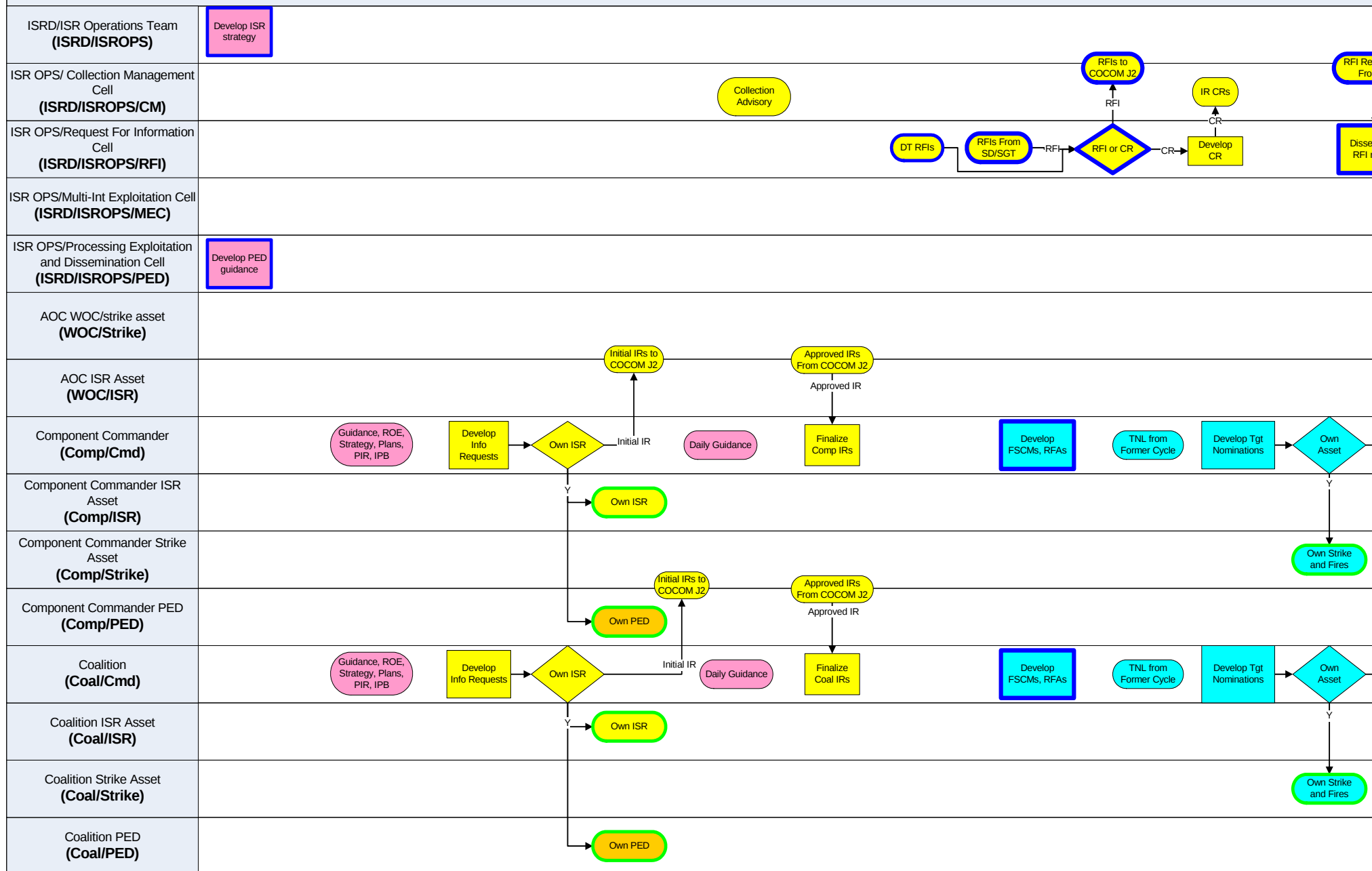
There have been minor changes to CMT since these figures were prepared, such as adding some cut-off times. They do not change the flow shown in the figures. The electronic version is fully up to date.

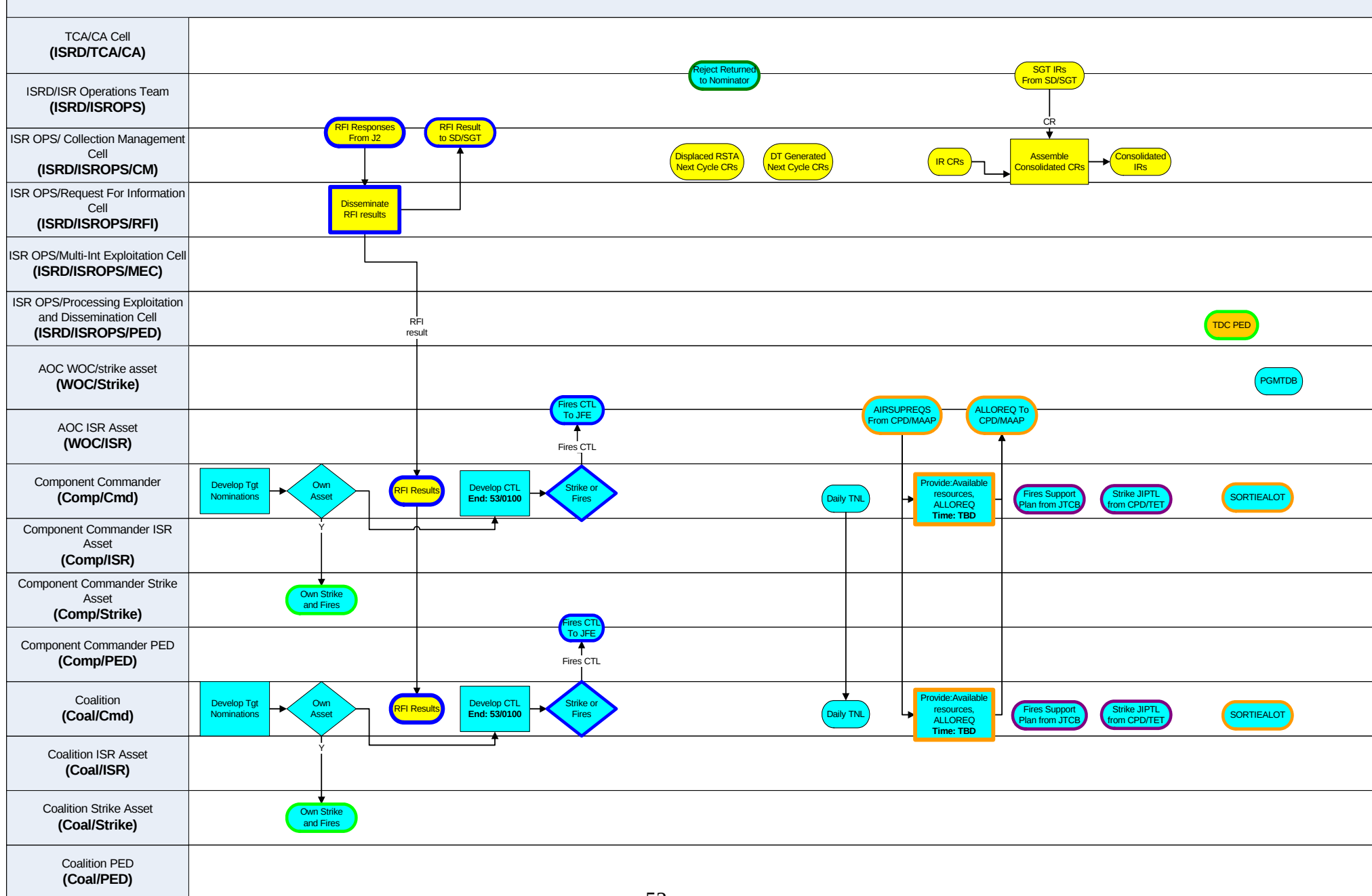


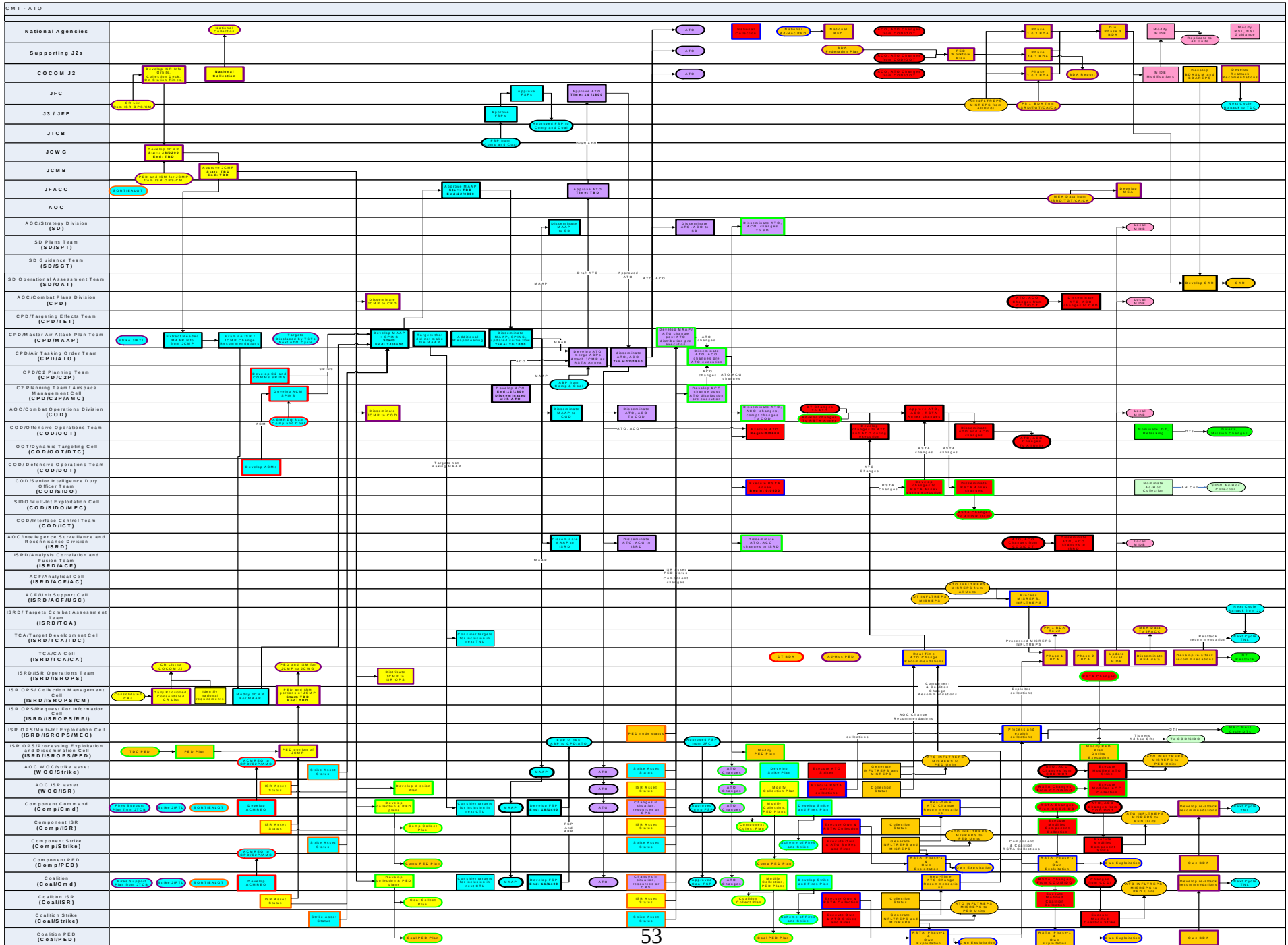


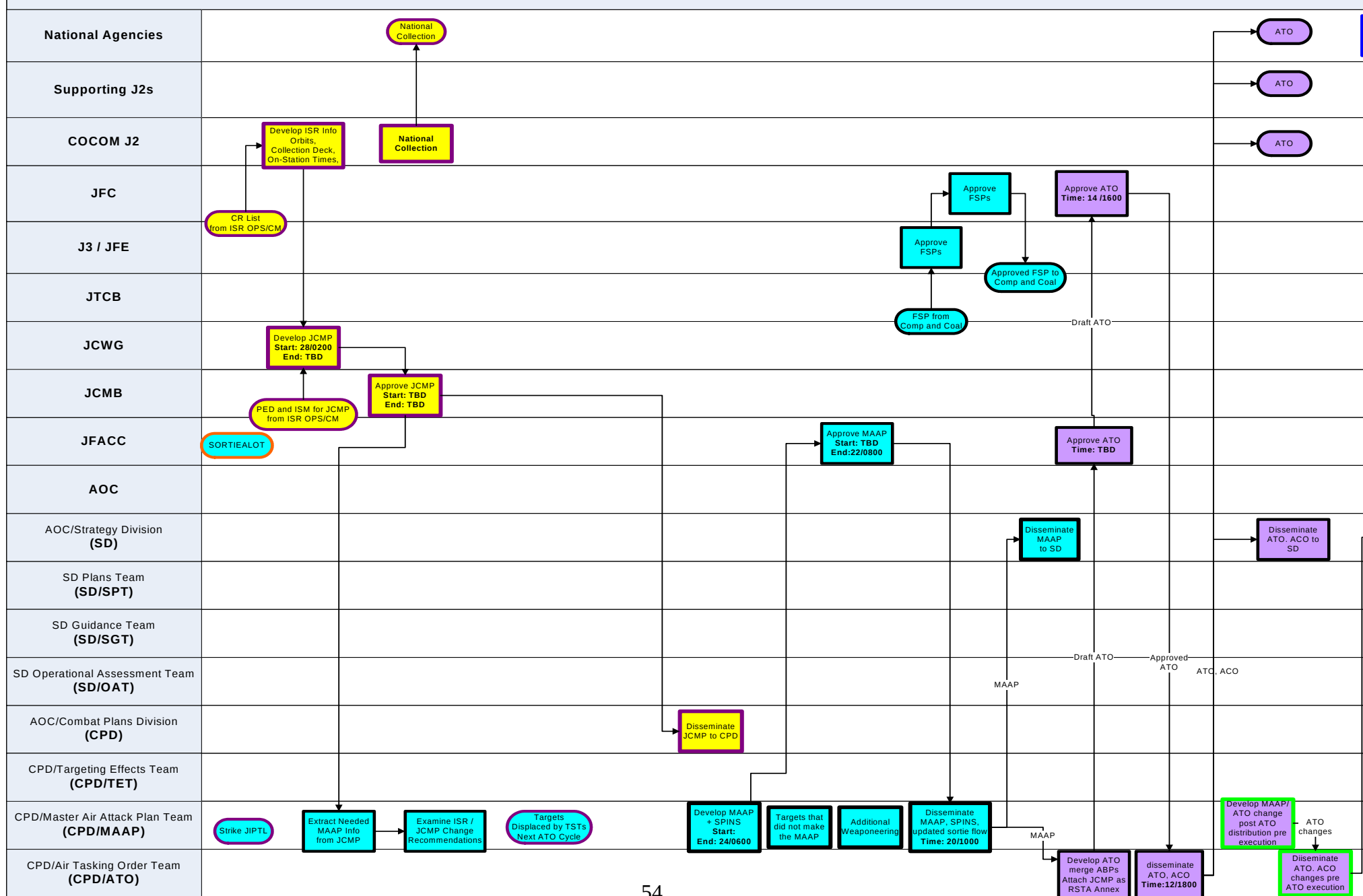


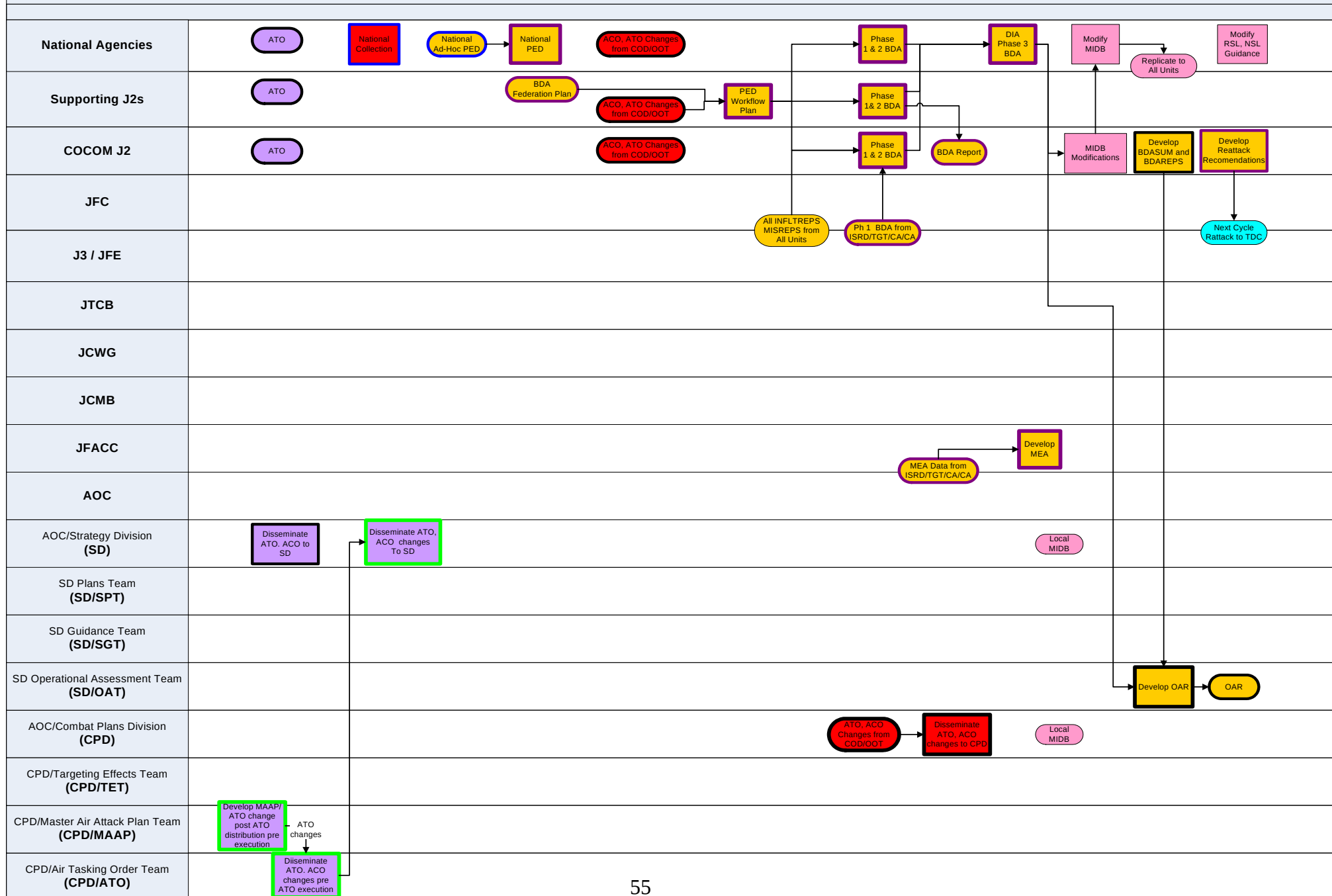


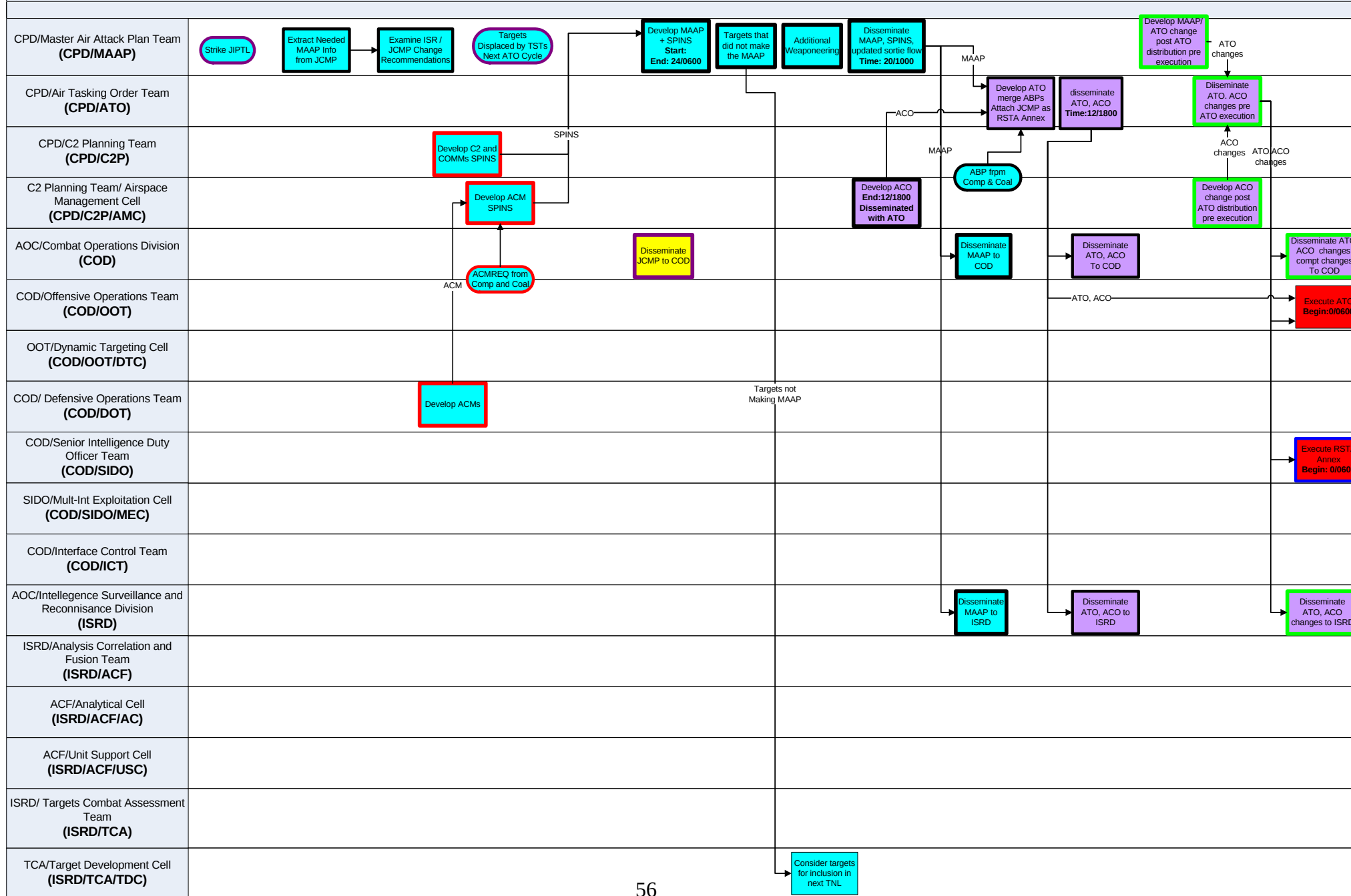




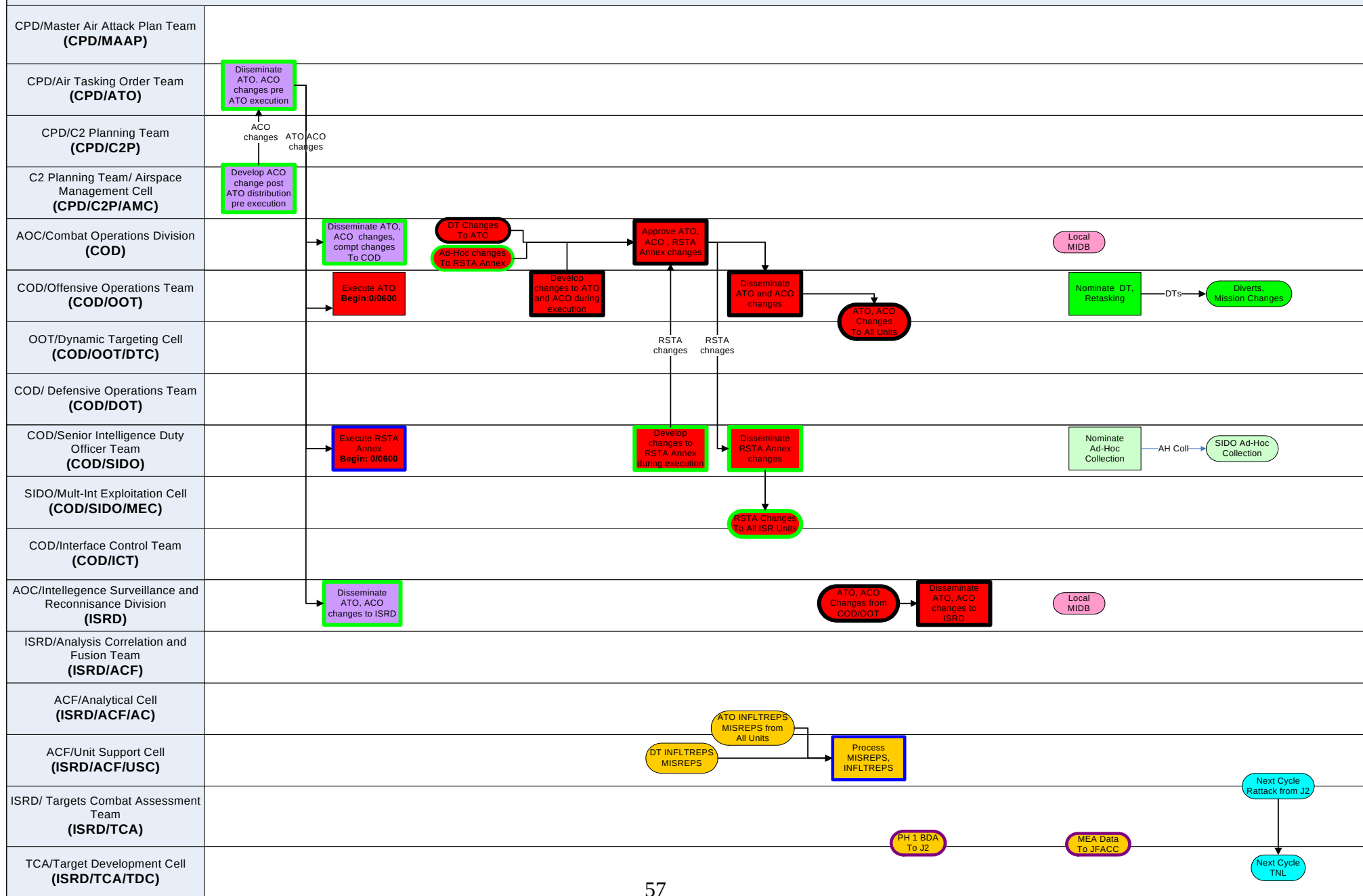


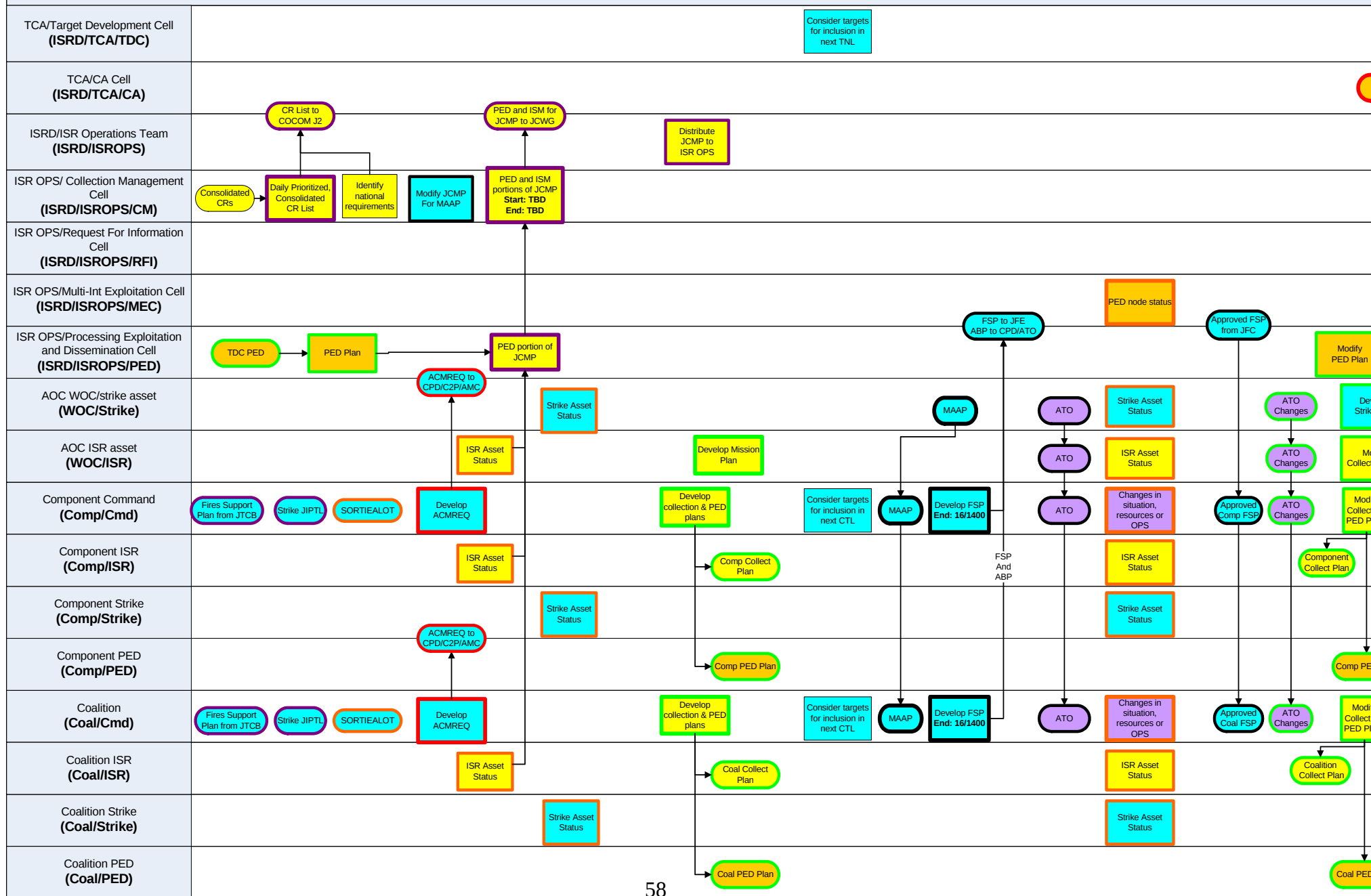


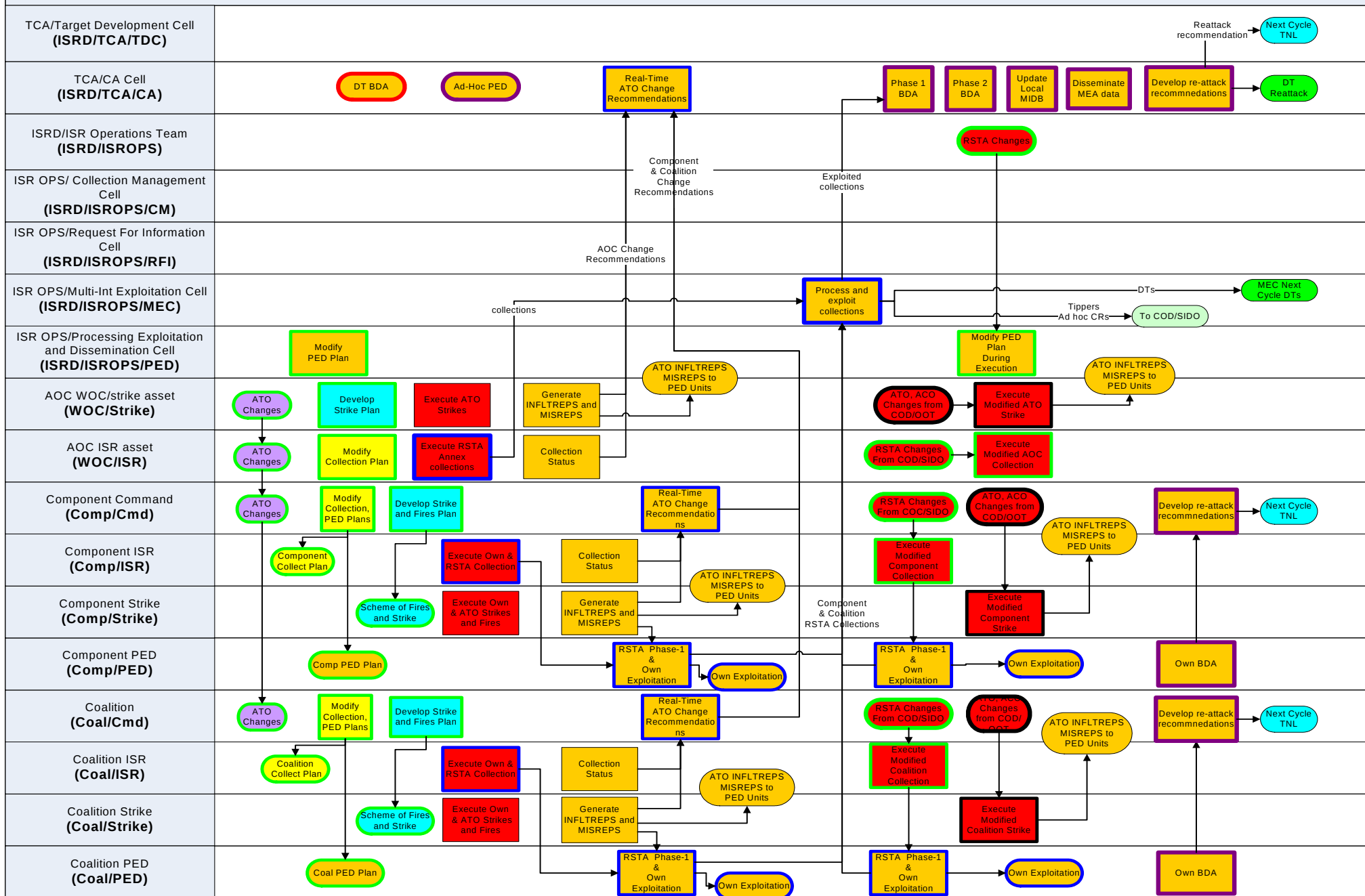


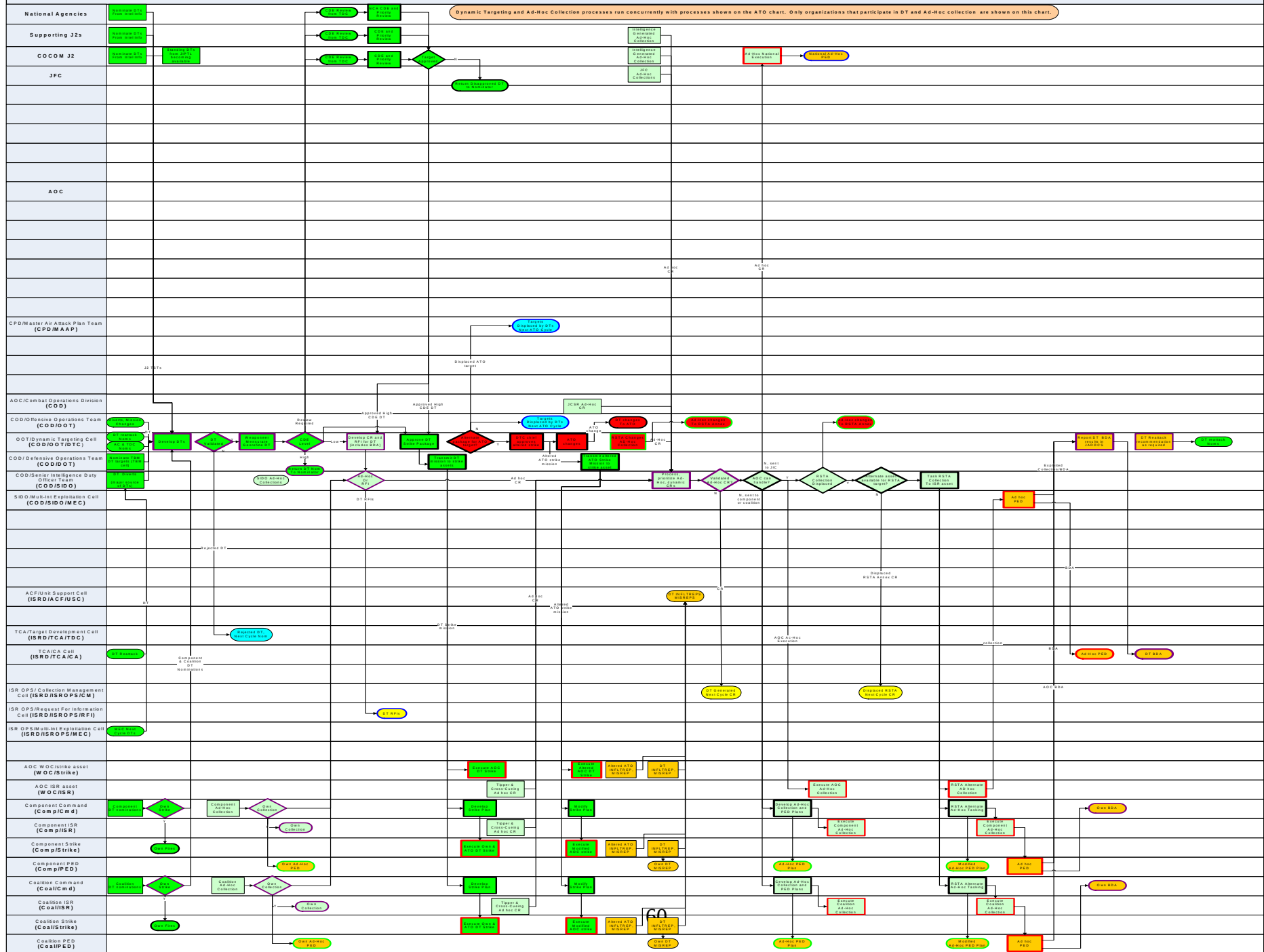


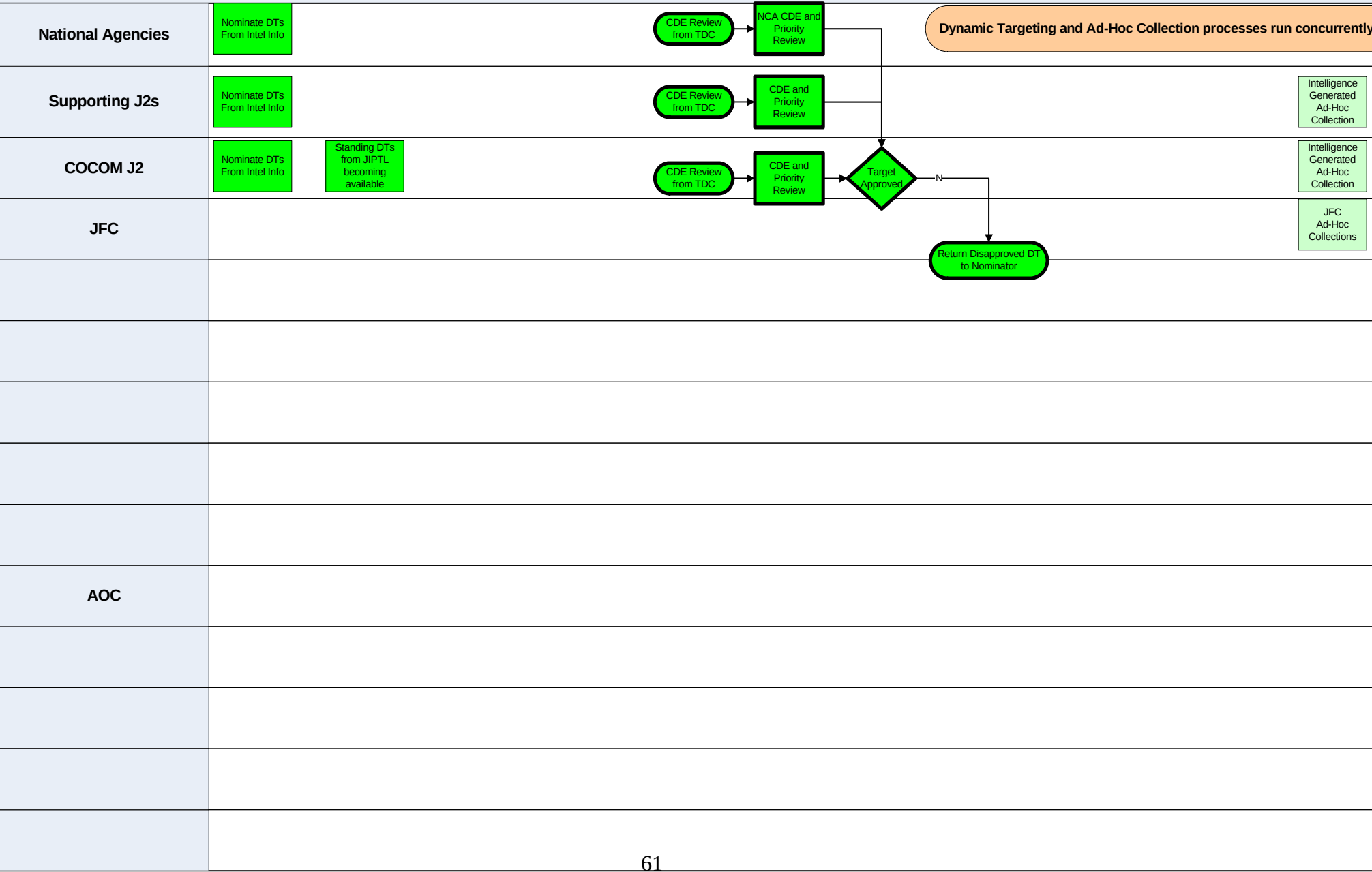
CMT – ATO 4











National Agencies	Dynamic Targeting and Ad-Hoc Collection processes run concurrently with processes shown on the ATO chart. Only organizations that participate in DT and Ad-Hoc collection are shown		
Supporting J2s	Intelligence Generated Ad-Hoc Collection		
COCOM J2	Intelligence Generated Ad-Hoc Collection	Ad-Hoc National Execution	National Ad-Hoc PED
JFC	JFC Ad-Hoc Collections		
AOC			

CPD/Master Air Attack Plan Team
(CPD/MAAP)

AOC/Combat Operations Division
(COD)

COD/Offensive Operations Team
(COD/OOT)

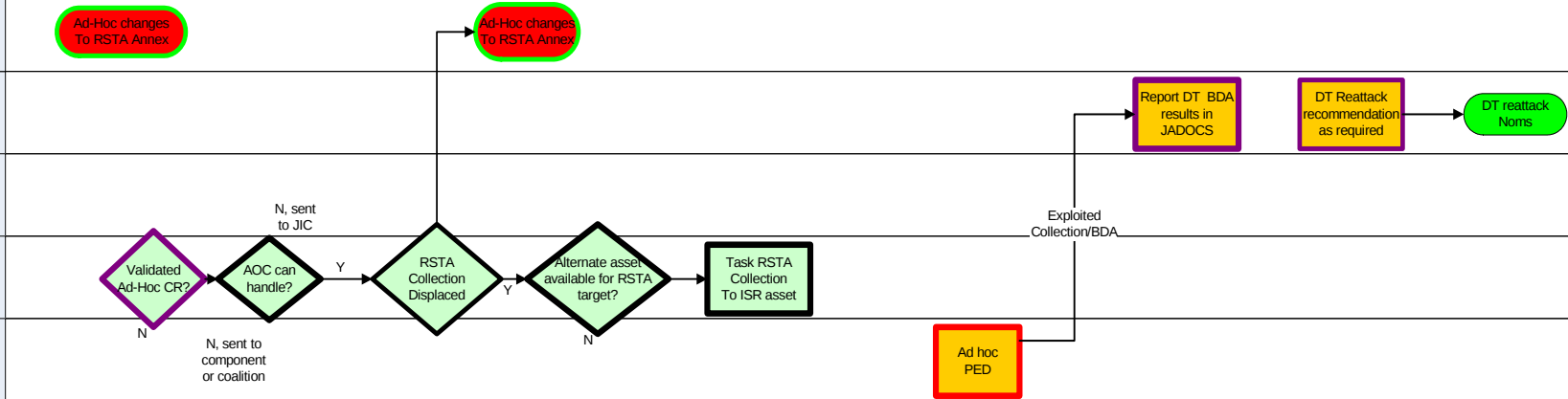
OOT/Dynamic Targeting Cell
(COD/OOT/DTC)

COD/ Defensive Operations Team
(COD/DOT)

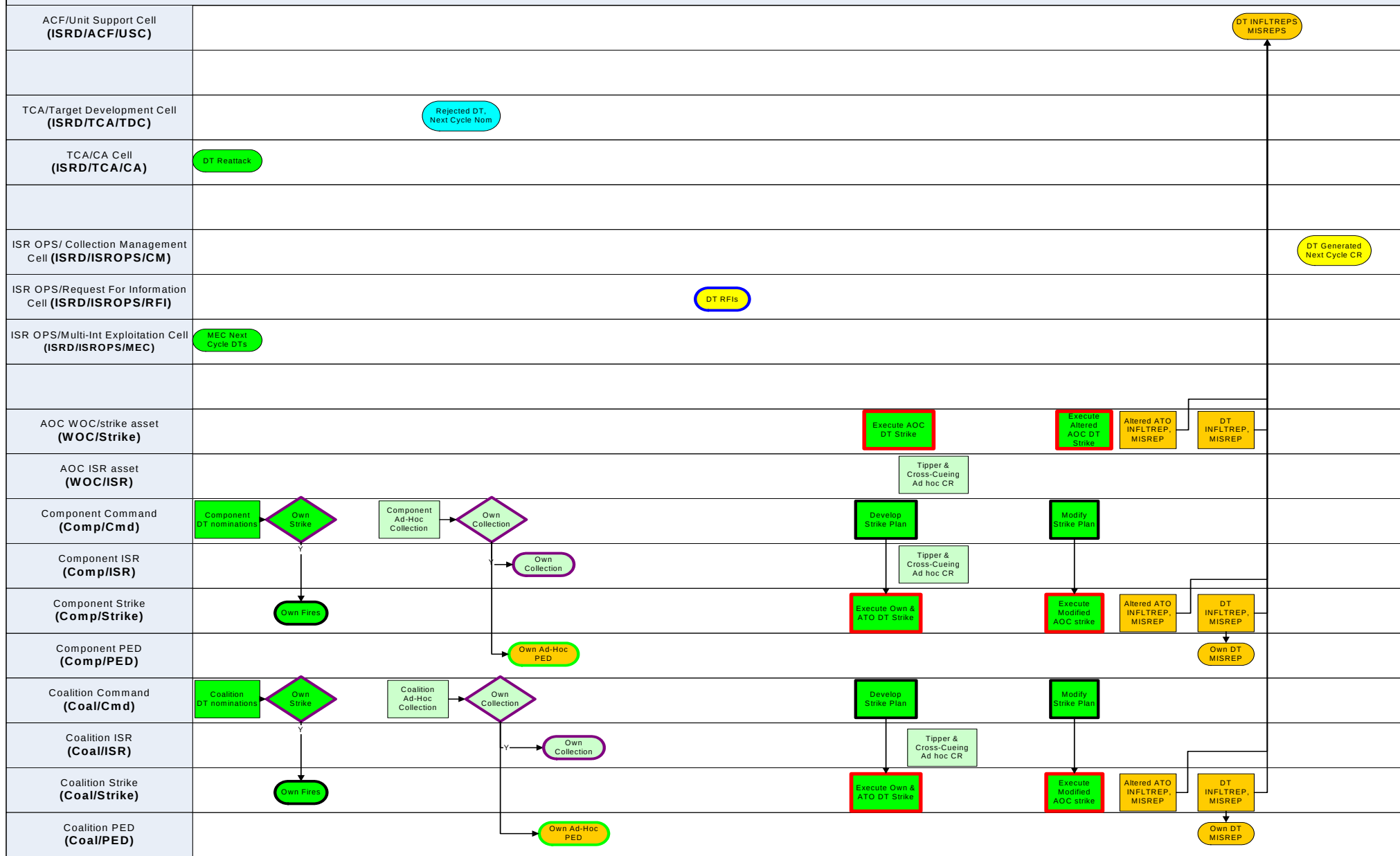
COD/Senior Intelligence Duty
Officer Team
(COD/SIDO)

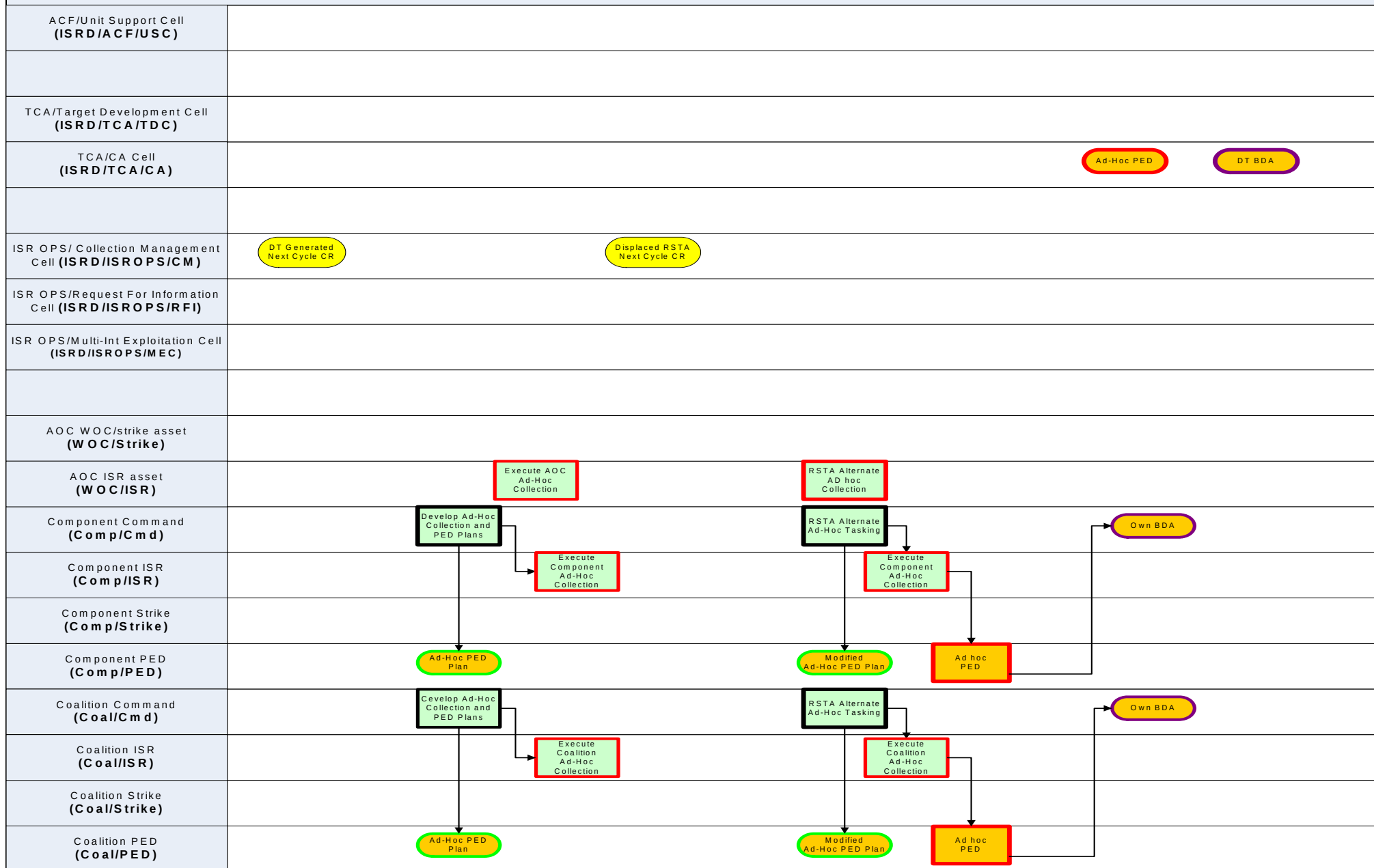
SIDO/Mult-Int Exploitation Cell
(COD/SIDO/MEC)

ACF/Unit Support Cell
(ISR/ACF/USC)



DT INFLTREPS
MISREPS





Appendix D. Acronyms

ABP.	Air Battle Plan
AC.	Analytical Cell
ACF.	Analysis, Correlation and Fusion Team
ACM.	Airspace Control Measure
ACMREQ.	Airspace Control Request
ACO.	Airspace Control Order
ACP.	Airspace Control Plan
AHC.	Ad Hoc Collection
AIRSUPREQ.	Air Support Request
ALLOREQ.	Allocation Request.
AMC.	Airspace Management Cell
AOC.	Air Operations Center
AOD.	Air Operations Directive
ATF.	Automated Target Folders
ATO.	Air Tasking Order
BDA	Battle Damage Assessment
BDAREPS.	BDA Reports
BDASUM.	BDA Summaries
CA.	Combat Assessment
CDE.	Collateral Damage Estimation
CENTCOM	Central Command
CM.	Collection Manager
CM.	Collection Management Cell
CMT.	Collection Management and Targeting
COA.	Course of Action
COCOM.	Combined Commander
COD.	Combat Operations Division
COG.	Center of Gravity
CONUS.	Continental United States
COP.	Common Operational Picture
CPCL.	Component Prioritized Collection List
CPD.	Combat Plans Division
CR.	Collection Requirement
CSAR.	Combat Search and Rescue
CTL.	Candidate Target List
C2P.	C2 Planning Team
DIA.	Defense Intelligence Agency
DODAF.	Department of Defense Architectural Framework
DOT.	Defensive Operations Team
DT.	Dynamic Target, Dynamic Targeting
DTC.	Dynamic Targeting Cell
FSCM.	Fire Support Control Measures
FSP.	Fire Support Plan
HHQ.	Higher Headquarters

HPT.	High Priority Target
HVT.	High Value Target
ICT.	Interface Control Team
INFLTREP.	In Flight Report
IPB.	Intelligence Preparation of the Battlespace
IR.	Information Request
ISM.	Intelligence Synchronization Matrix
ISR.	Intelligence, Surveillance, and Reconnaissance
ISRD.	Intelligence Surveillance Reconnaissance Division
ISROPS.	ISR Operations Team
JAAP.	Joint Air Attack Plan
JAOP.	Joint Air Operations Plan.
JCMB.	Joint Collection Management Board
JCMP.	Joint Collection Management Plan
JCSR.	Joint Combat Search and Rescue
JCWG.	Joint Collection Working Group
JFACC.	Joint Forces Air Component Commander
JFC.	Joint Force Commander
JFE.	Joint Fires Element
JIC.	Joint Intelligence Center
JIIB.	Joint Intelligence Interoperability Board
JIPCL.	Joint Integrated Prioritized Collection List
JIPTL.	Joint Integrated Prioritized Target List
JSBA.	JIIB System Baseline Assessment
JTCB.	Joint Targeting Coordination Board.
JTL.	Joint Target List
MAAP.	Master Air Attack Plan
MEA.	Munitions Effectiveness Assessment
MEC.	Multi-Int Exploitation Cell
MIDB.	Modernized Intelligence Data Base
MISREPS.	Mission Reports
MOE.	Measure of Effectiveness
MOP.	Measure of Performance
NAI.	Named Area of Interest
NCA.	National Command Authority
NGA.	National Geospatial-Intelligence Agency
NSL.	No-Strike List
OAR.	Operational Assessment Report
OAT.	Operational Assessment Team
OOT.	Offensive Operations Team
OPLAN.	Operations Plan
OPORD.	Operations Order
OV.	Operational View
PED.	Processing Exploitation and Dissemination
PGMTDB.	Precision Guided Munition Target Data Base
PIR.	Prioritized Intelligence Requirement

PRISM.	Planning Tool for Resource Integration, Synchronization and Management.
RFA.	Restricted Fire Area
RFI.	Requests for Information
ROE.	Rules of Engagement
RSTA.	Reconnaissance, Surveillance, and Target Acquisition
RTL.	Restricted Target List
SD.	Strategy Division
SGT.	Strategy Guidance Team
SIDO.	Senior Intelligence Duty Officer
SITREP.	Situation Report
SORTIEALOT .	Sortie Allotment
SPINS.	Special Instructions
SPT.	Strategy Plans Team
TAI.	Target Area of Interest
TBM.	Theater Ballistic Missile
TBMCS.	Theater Battle Management Core Systems
TCA.	Targets Combat Assessment Team
TDC.	Target Development Cell
TET.	Targeting Effects Team
TIC.	Troops in Contact
TNL.	Target Nomination List
TST.	Time Sensitive Target
USC.	Unit Support Cell
WOC.	Wing Operations Center

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