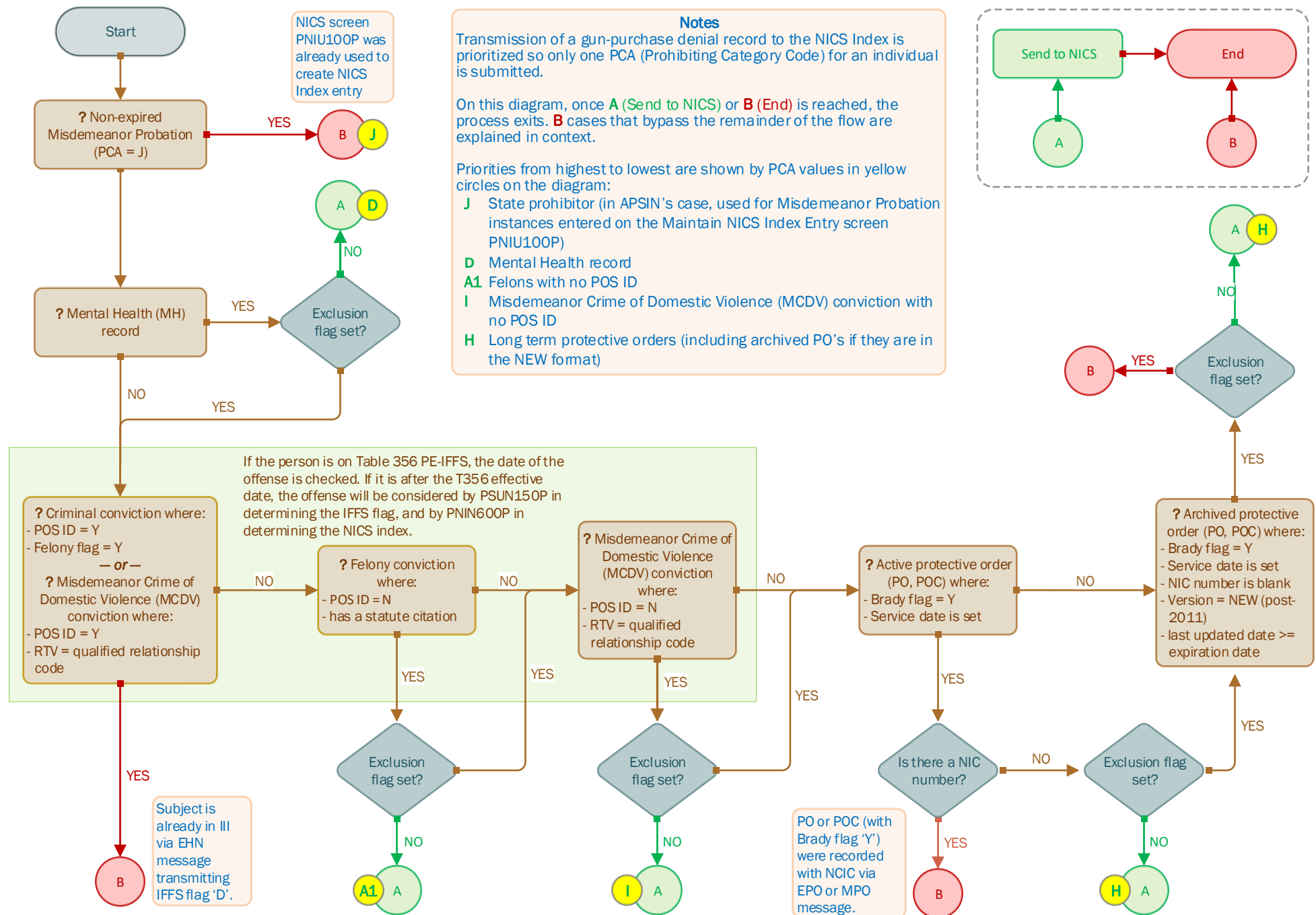


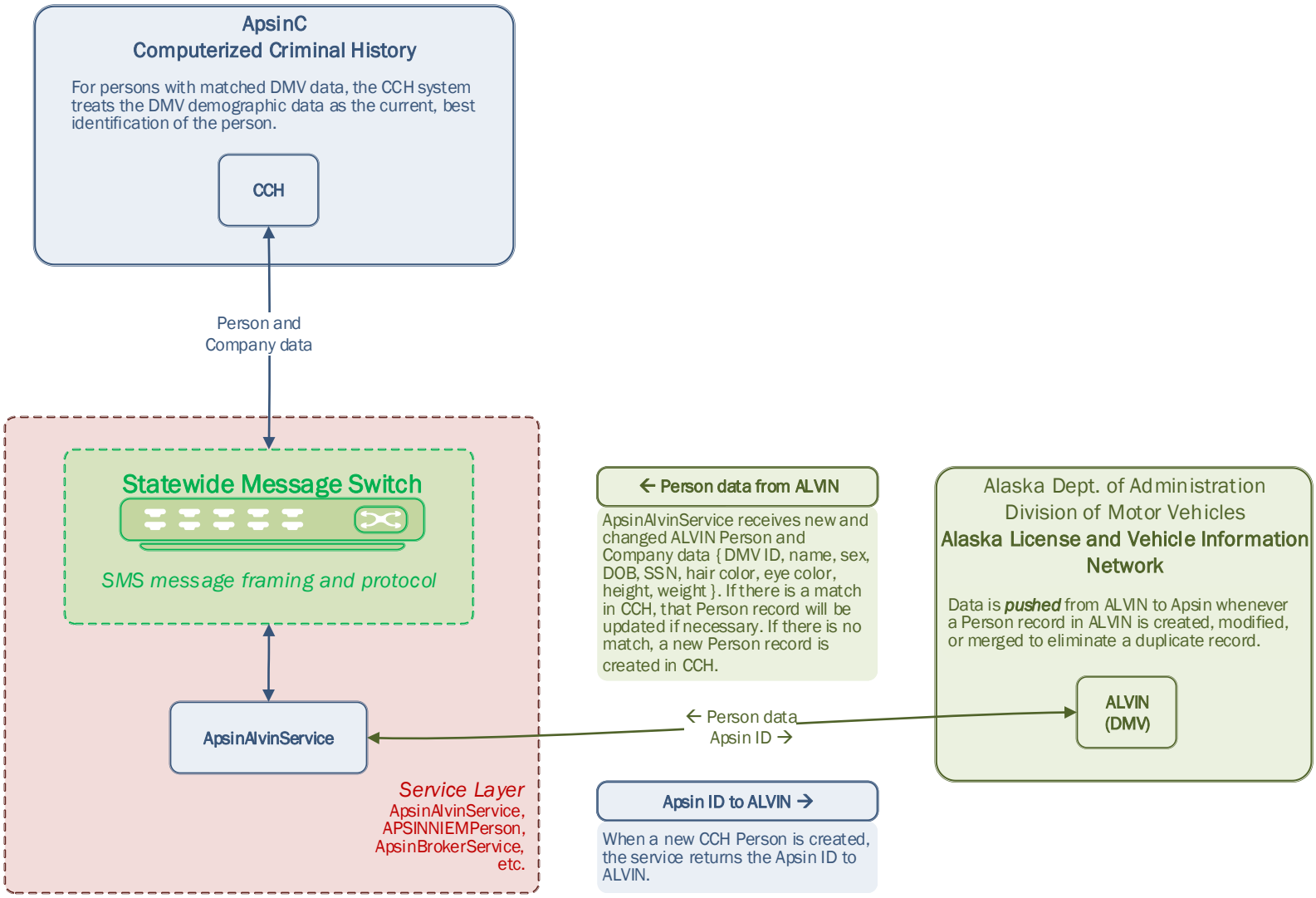
### 3.11.1 NICS

## APSIN NICS Interface Record-Inclusion Overview



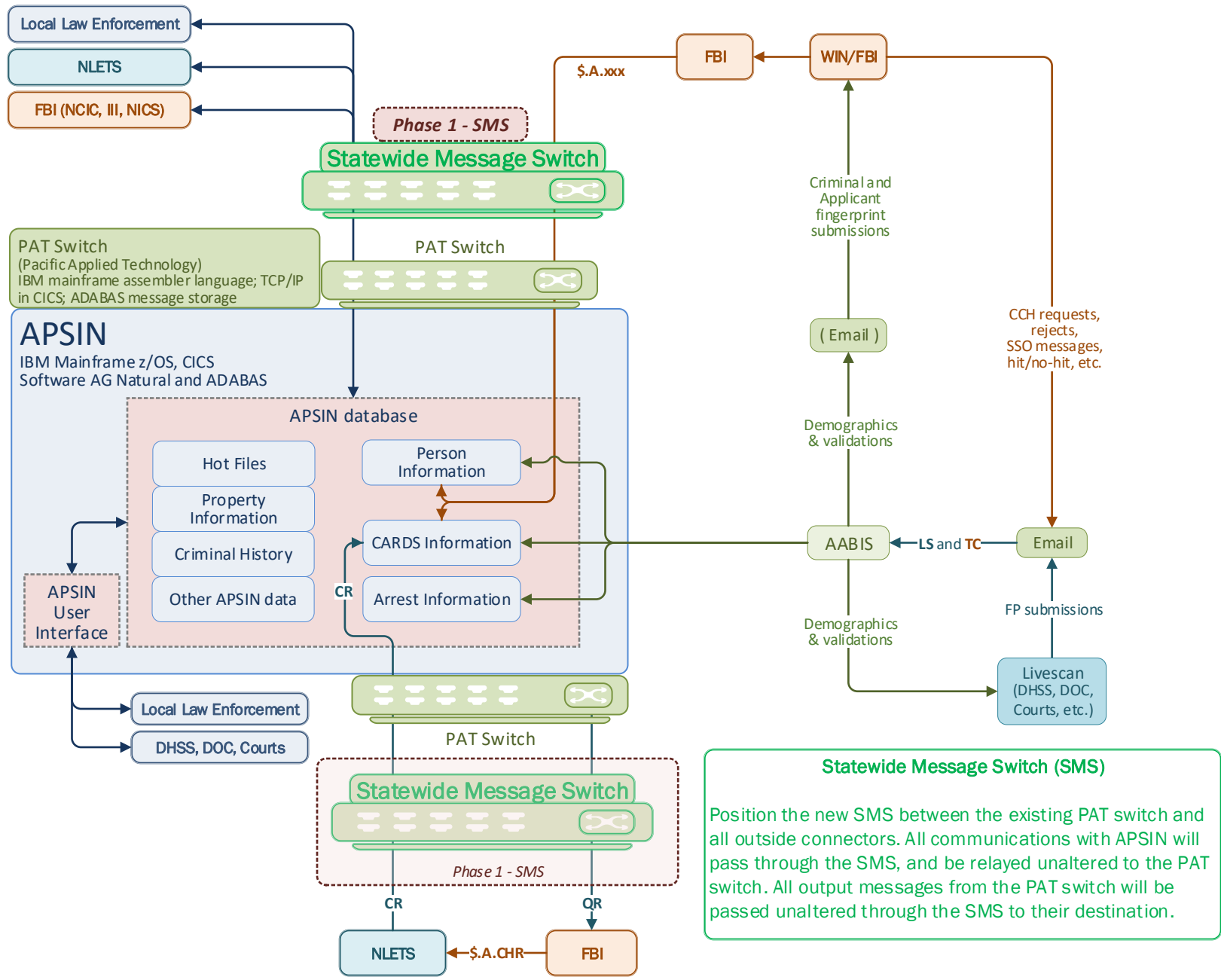
# Alaska Department of Public Safety ApsinC Interface with DMV ALVIN

## 3.12.1 Apsin-ALVIN



Alaska Department of Public Safety  
 Alaska Public Safety Information Network  
**ApsinC Phase 1 – SMS**

4.1.1 SMS



- Local Law Enforcement
- NLETS
- FBI (NCIC, III, NICS)

**PAT Switch**  
 (Pacific Applied Technology)  
 IBM mainframe assembler language; TCP/IP  
 in CICS; ADABAS message storage

**APSIN**  
 IBM Mainframe z/OS, CICS  
 Software AG Natural and ADABAS

**APSIN database**

- Hot Files
- Property Information
- Criminal History
- Other APSIN data
- Person Information
- CARDS Information
- Arrest Information

**APSIN User Interface**

- Local Law Enforcement
- DHSS, DOC, Courts

**WIN/FBI**

**FBI** (via \$.A.xxx)

**(Email)**

**AABIS**

**Email**

**Livescan** (DHSS, DOC, Courts, etc.)

Flow: Criminal and Applicant fingerprint submissions → (Email) → AABIS → (Email) → Livescan. AABIS also receives LS and TC from Email. Livescan sends FP submissions to Email. Email sends CCH requests, rejects, SSO messages, hit/no-hit, etc. to WIN/FBI.

- NLETS
- FBI (via \$.A.CHR)

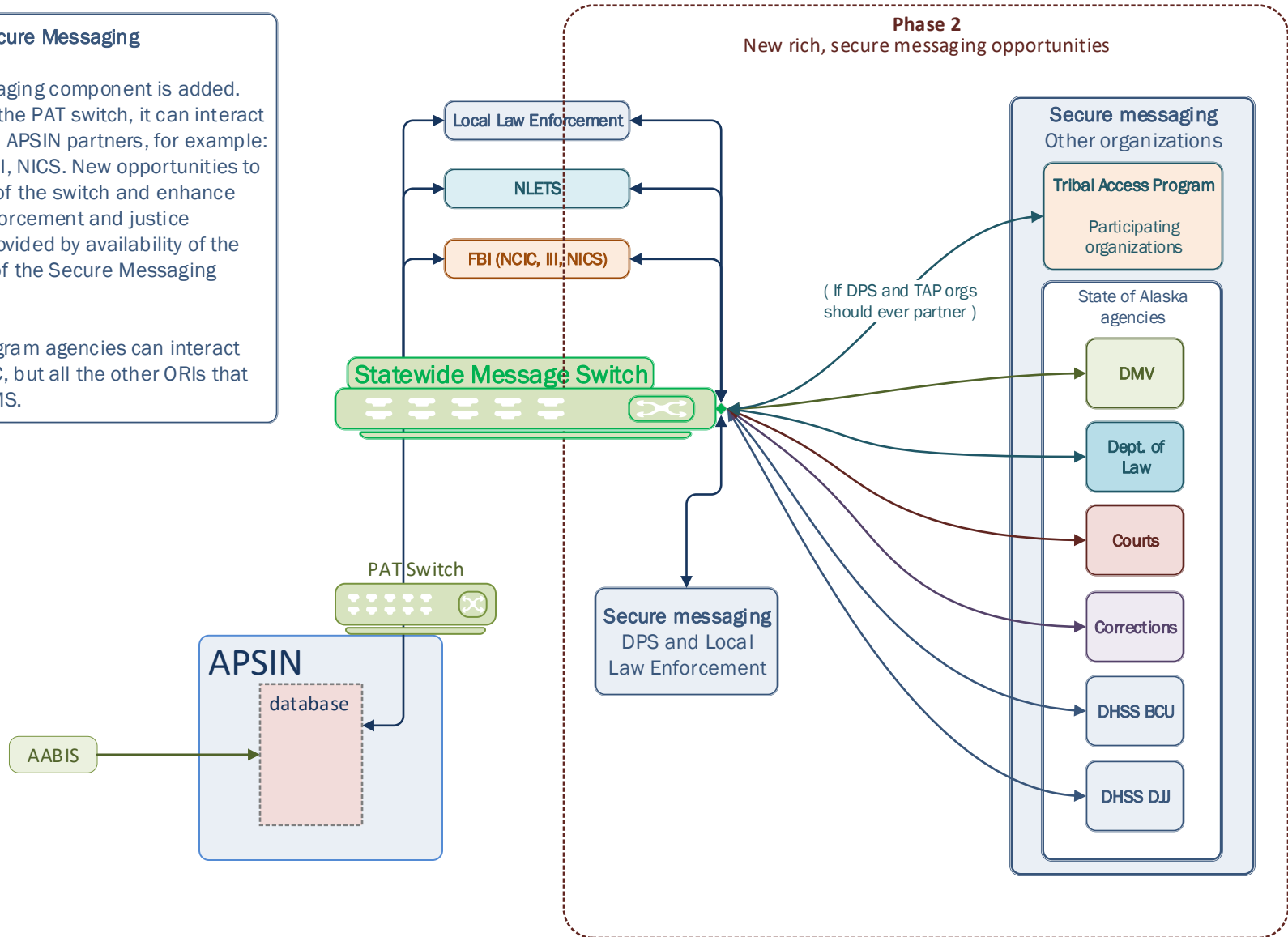
# Alaska Department of Public Safety Alaska Public Safety Information Network *ApsinC Phase 2 – Secure Messaging*

## 4.2.1 Secure Messaging

### Secure Messaging

The Secure Messaging component is added. Independently of the PAT switch, it can interact with all traditional APSIN partners, for example: queries of NCIC, III, NICS. New opportunities to extend the utility of the switch and enhance statewide law enforcement and justice operations are provided by availability of the SMS to all users of the Secure Messaging component.

Tribal Access Program agencies can interact with not only NCIC, but all the other ORIs that connect to the SMS.



Alaska Department of Public Safety  
 Alaska Public Safety Information Network  
**ApsinC Phase 3 – CCH, SOR, Hotfiles**

4.3.1 CCH, SOR, Hotfiles

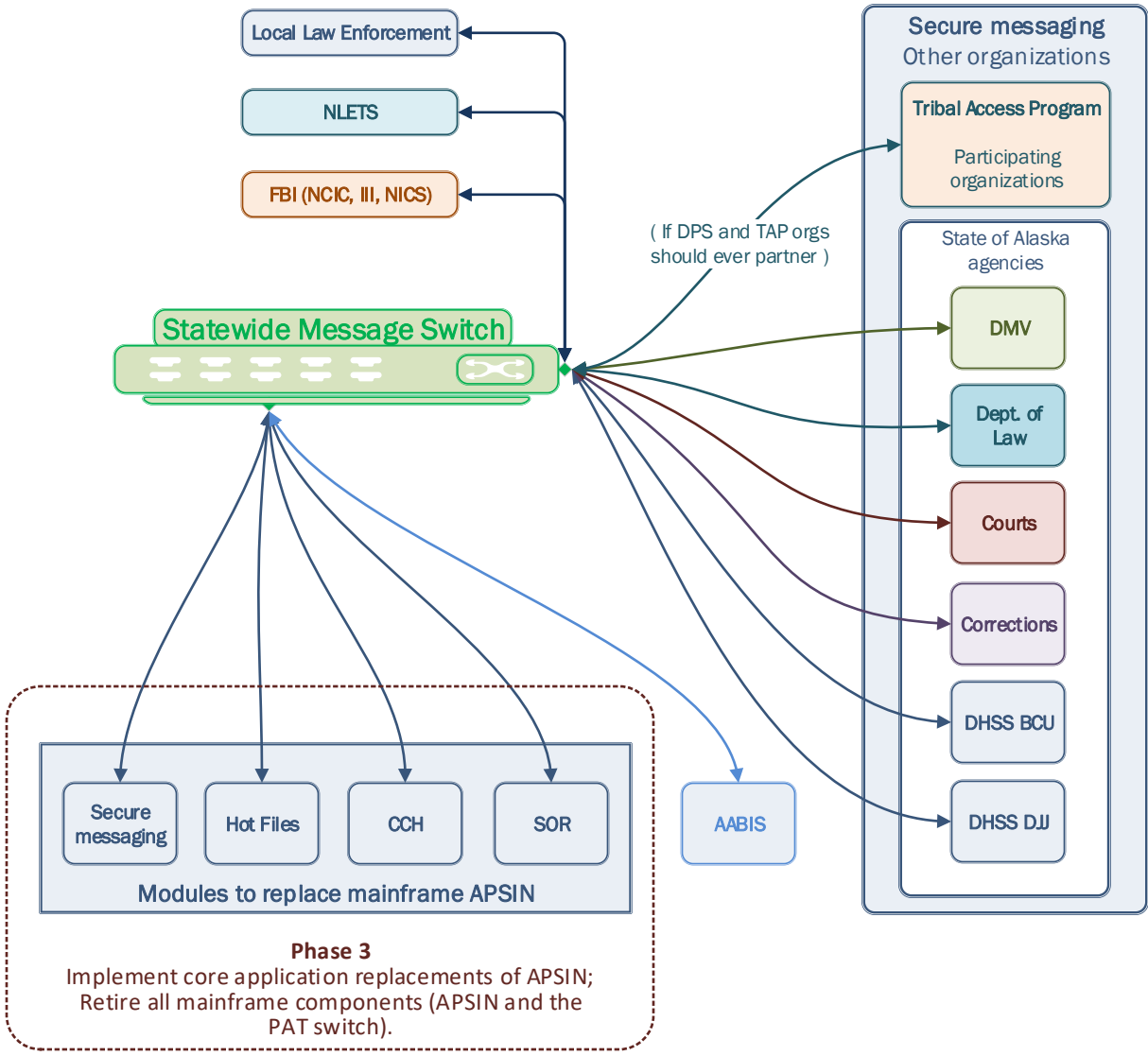
**CCH + SOR + Hotfiles**

The core components that replace legacy APSIN are introduced:

- CCH – Computerized Criminal History
- SOR – Sex Offender Registry
- Hotfiles – wants/warrants, missing persons, property, vehicles, securities, etc. plus Alaska in-state-only hotfiles

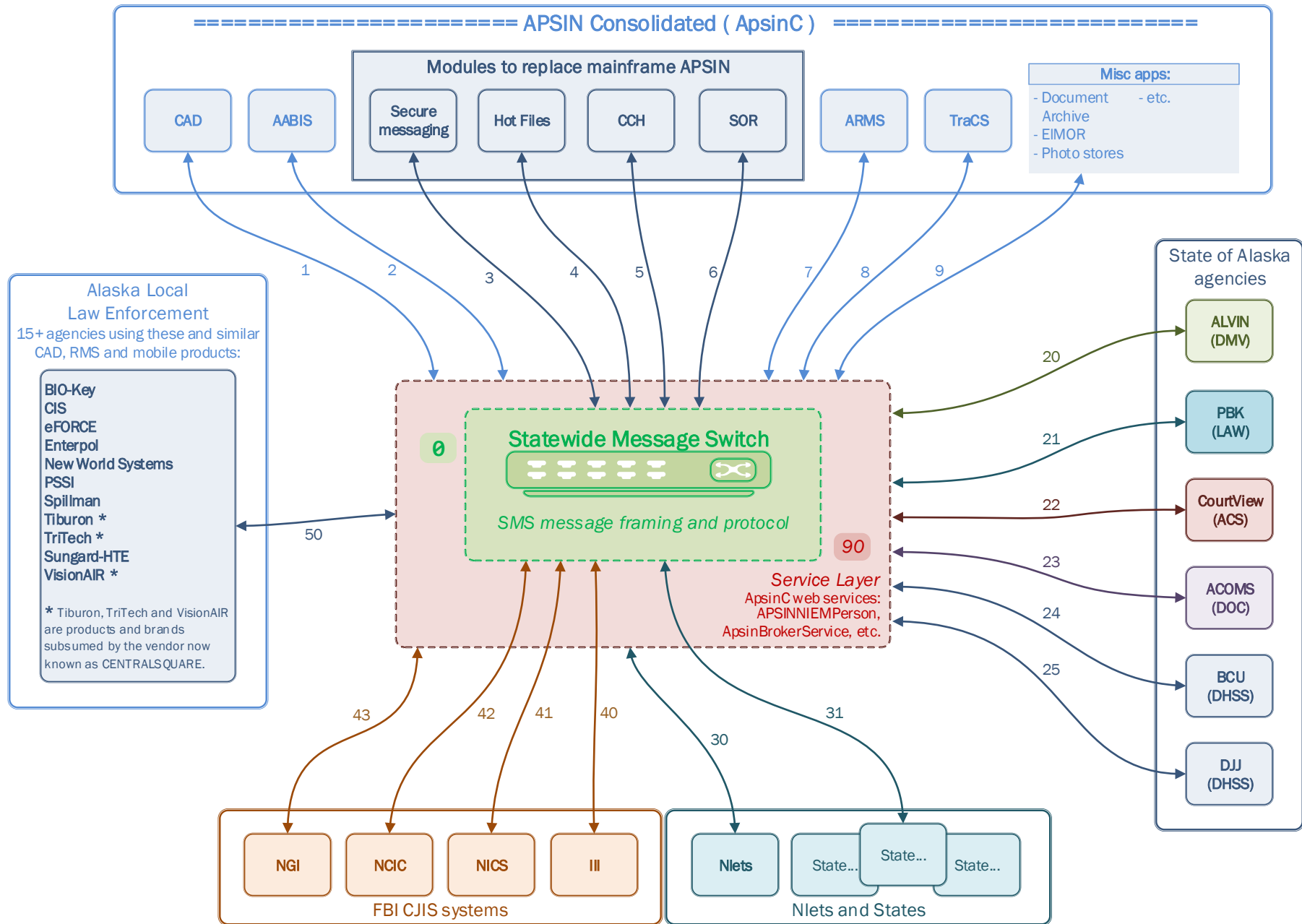
Historical data in APSIN is loaded into the new component databases. Mainframe APSIN and the PAT message switch are decommissioned.

This diagram is simplistic in its focus on the additional three components. *After implementation of Phase 3, all of the capabilities shown on the ApsinC Overview diagram and its Legend: ApsinC Overview with Requirements Detailed are now operational. Interagency automated integrations can be built using the SMS and the Service Layer as described on those documents.*



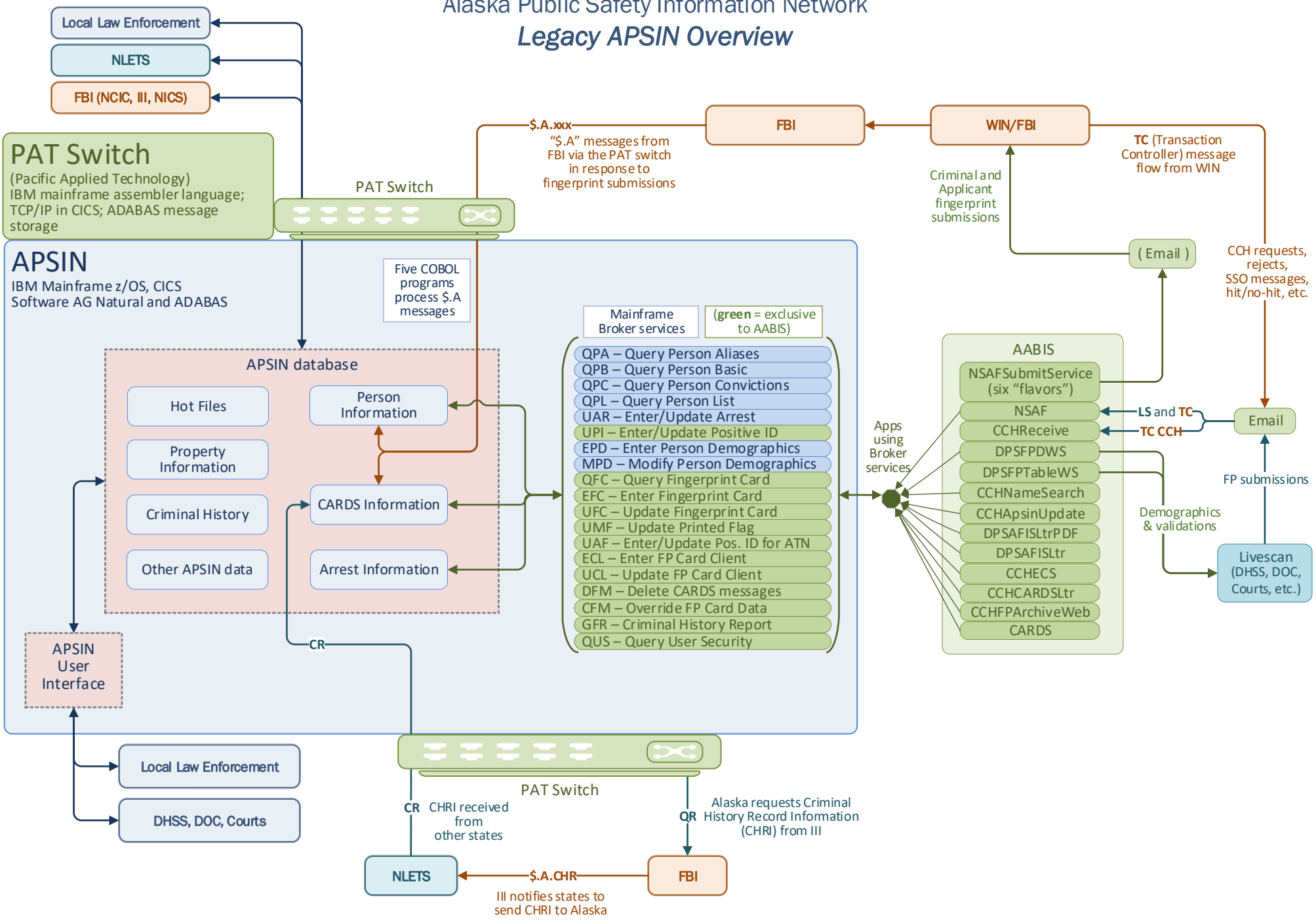
# Alaska Department of Public Safety ApsinC Overview

## 5.1 ApsinC Overview



# Alaska Department of Public Safety Alaska Public Safety Information Network *Legacy APSIN Overview*

## 6.3.1 Legacy APSIN Overview



# Alaska Department of Public Safety DPS APSIN and PAT Message Switch Flows

**\* PRJ-NCIC-MESSAGE...**

...is a simple record type comprised of a 24-byte key and ten 128-byte blocks (1,280 bytes message data per record). One "PAT message" is comprised of **1-to-n** PRJ-NCIC-MESSAGE records, all of which share mostly the same value of the key MLOG-RECKEY (probably the first 21 bytes; see image).

```
DCB-REC-KEY IS 24 BYTES IN HEXADECIMAL:
DCB-KEY-QUEUE (1) : B
DCB-KEY-DSTAT (1) : N
DCB-KEY-TERMID (4) : 8451
DCB-KEY-DATETIME (8) : 020090307050250
DCB-KEY-MSGNUMB (4) : 0000528
DCB-KEY-UNIQUE (3) : 00001
DCB-KEY-SEGMENT (3) : 99991
```

**LEGEND**

Off-page connector / Active hyperlink for the RFI

Broken or misdirected hyperlink (because this document is only a subset)

Primary process in focus

Secondary processes in other colors

**III** - Interstate Identification Index (FBI)

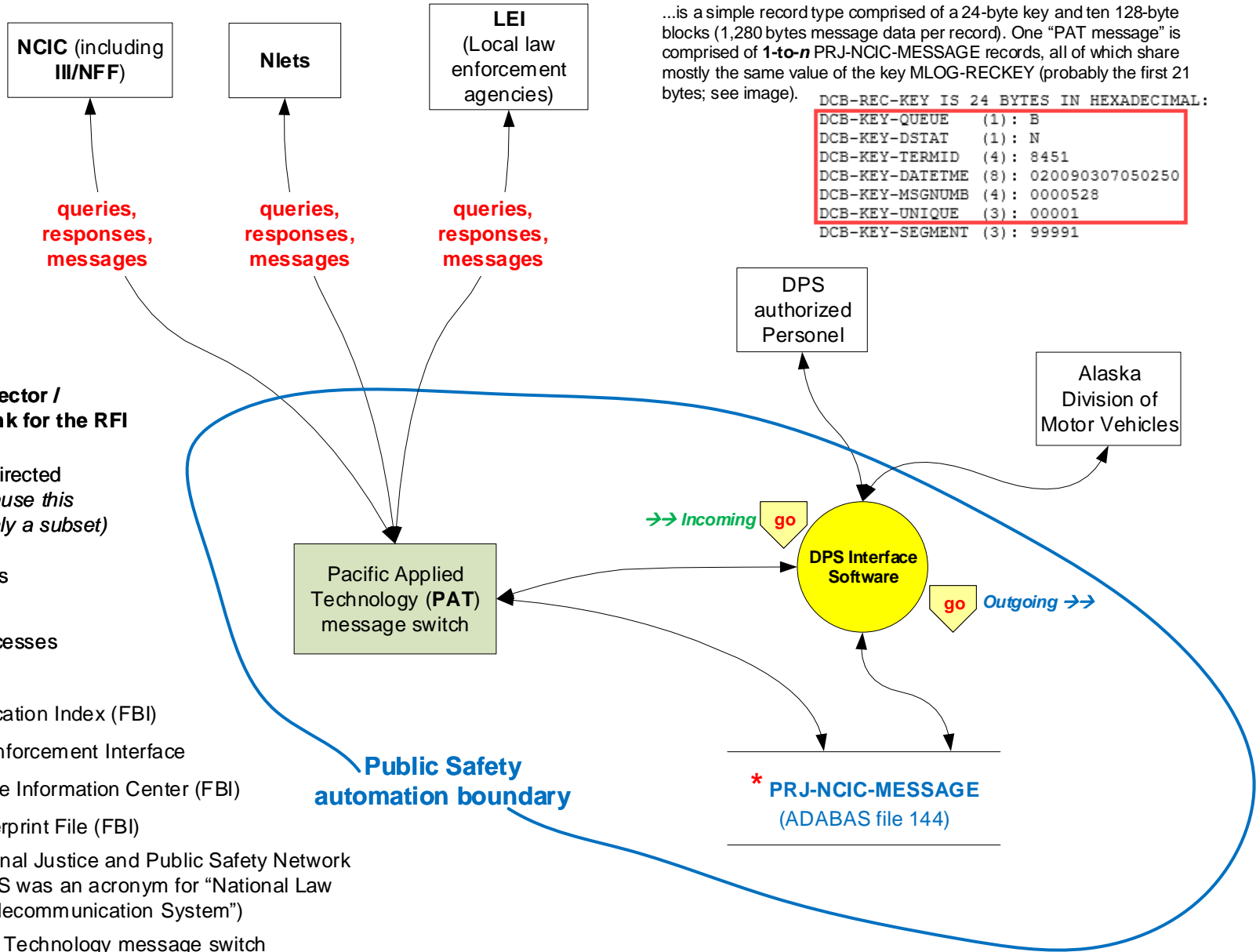
**LEI** - APSIN's Law Enforcement Interface

**NCIC** - National Crime Information Center (FBI)

**NFF** - National Fingerprint File (FBI)

**Nlets** - The International Justice and Public Safety Network (originally NLETS was an acronym for "National Law Enforcement Telecommunication System")

**PAT** - Pacific Applied Technology message switch

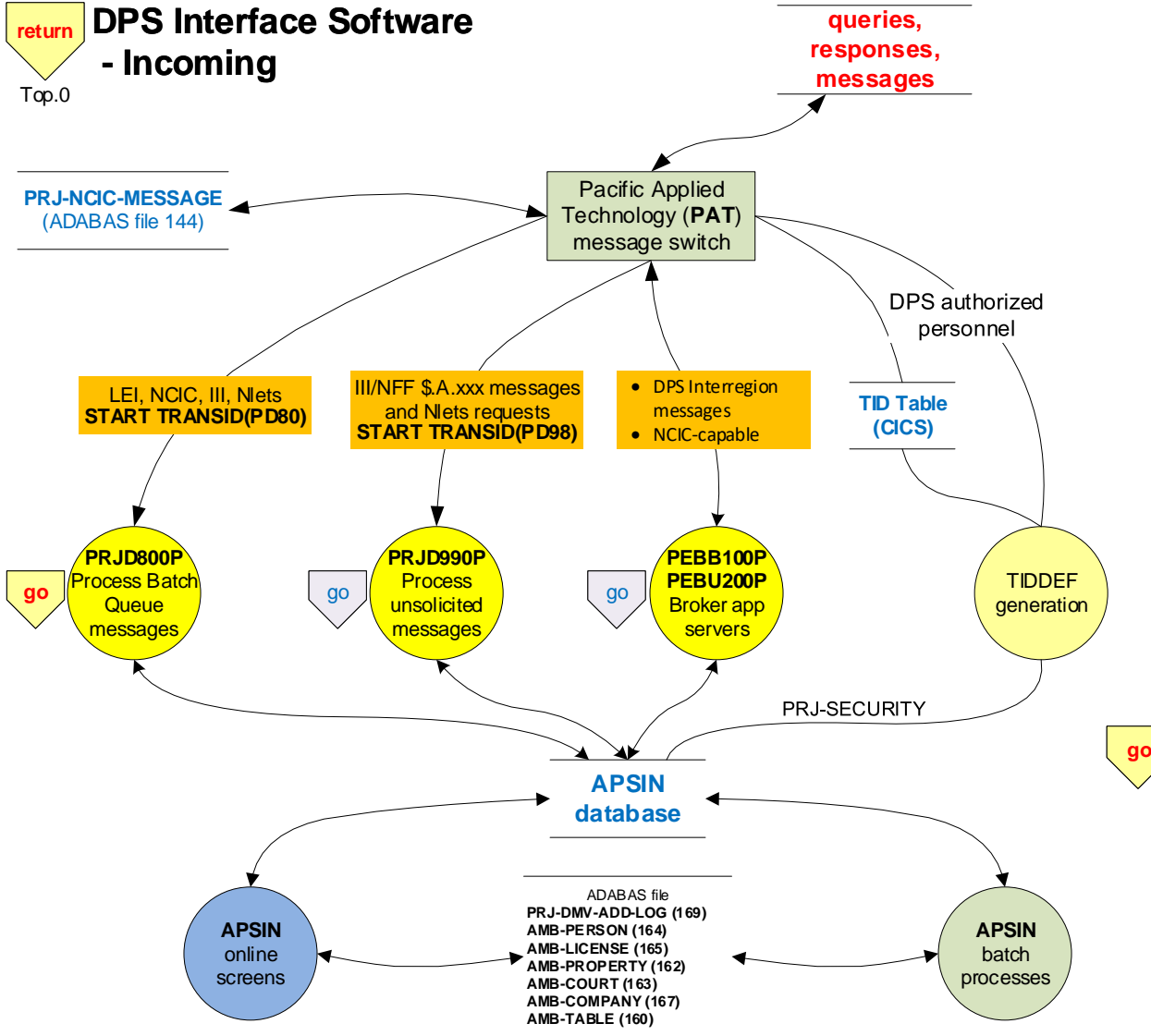




# DPS Interface Software - Incoming

Top.0

DFD level 0



## How the PAT message switch starts DPS software

When PAT invokes DPS software (via START TRANSID PD80 or PD99) it passes 1,132 bytes of data. The invoked programs (PRJD800P and PRJD990P) use the CICS RETRIEVE command to copy the data into working storage.

The 1,132 bytes are structured as follows:

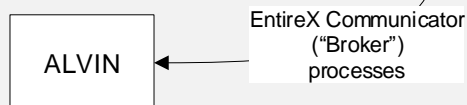
- 80-byte PAT Line Transmission Control Block (LXCB). Although data is stored in the database (PRJ-NCIC-MESSAGE file) in LXCB FMT4 (the newer PAT "format 4"), the LXCB is passed to PD80 and PD99 tasks using the older FMT2 format.
- 4-byte binary value of the full size of the transmitted message (it might be longer than the 1,024 bytes made available via the CICS RETRIEVE).
- 24-byte MLOG-RECKEY value which is the key to the PRJ-NCIC-MESSAGE file.
- 1,024 bytes of the transmitted message.

If the transmitted message is longer than 1,024 bytes, downstream processing programs (invoked during PD80 and PD98 tasks) will use the PATIOQUE 'UNA' ("UNstring As-is") command to retrieve the entire message.

## PRJ-NCIC-MESSAGE file management

The PAT message log, stored as ADABAS file PRJ-NCIC-MESSAGE, is too volatile and "raw" to be downloaded by Real-Time Sync (Treehouse DPSSync software and SQL Server), hence it is managed in a way not unlike the BizTalk MessageBox Database albeit in an old-school mainframe manner. The link shows an excerpt of documentation that explains the batch processing and the resulting mainframe datasets that comprise the archive of the message log.

## DMV



Before the original ALVIN was replaced with a Windows-based system on Jan. 20, 2018, there were online, real-time interfaces between ALVIN and APSIN. ALVIN now maintains the original AMB-xxx ADABAS files only as an asynchronous interface to APSIN

APSIN continues to read and update AMB files in real time. ALVIN continues to post Person adds and merges into ADABAS file PRJ-DMV-ADD-LOG. APSIN batch processes import ALVIN data as they have ever since ALVIN was separated from APSIN in 1997.

return

DPS.0

**Purge and Audit PRJ-NCIC-MESSAGE records:**  
Jobs PRJB001P, PRJB007P, PRJB030P, PATR138P, ad hoc PATQ\*\*\*\*

## 0. Summary

(Times updated 4/5/2018)

Job	JCL Proc	Program(s)	Frequency	Purpose	Remarks
PRJB001P	(none)	PRJB001P (COBOL)	Daily approx. 22:35	Purge PRJ-NCIC-MESSAGE file in Production (DBID 215) and Test (DBID 227). Write image of deleted records to DPSN.PRJ.NCIC.MESS(+1).	COBOL program PRJB001P uses ADABAS direct calls to purge from the database supplied via "PARM= <u>dbid</u> " on the EXEC card.  Prod. step writes image of deleted records to tape. Deletion criteria logic for Prod is complex.  Test step does not write image to tape. Deletion criteria for Test very simple: delete all messages > 21 days old.
PRJB007P	PRJC0070	PAJZ9997 (DPS file utility)	Sunday approx. 01:30	Copy current generations of daily purge image from DPSN.PRJ.NCIC.MESS to DPSN.PRJ.NCIC.MWK(+1)	
PRJB030P	PRJC0300	PAJZ9997 (DPS file utility)	Monthly 2nd day approx. 02:00	Copy current generations of daily purge image from DPSN.PRJ.NCIC.MWK to DPSN.PRJ.NCIC.MONTH and DPS.PRJ.NCIC.MONTH.VAULT	
PATR138P	PRJC0010 (Natural exec)	PPR1381P PPR1382P (both Natural)	Formerly: Sunday after PRJB007P (last run 12/30/2012)	Create a report to audit accuracy of NIC numbers in APSIN compared to what was received from NCIC.	The input dataset is the generation of DPSN.PRJ.NCIC.MWK just created by PRJB007P.
Ad hoc: PATQHEXT PATQREXT PATQHORI PATQRORI	PRJC0010 (Natural exec)	Natural: PPR1236P PPR1236P PPR1231P PPR1231P	Beginning of month or as needed by [ Lisa Purinton's predecessor Bill Parker ]	Extract NCIC message data for auditing purposes.	The input dataset is the selected generation of DPSN.PRJ.NCIC.MONTH (created by job PRJB030P).

anchqqsan01 > Orgdata > SWS > SIS > Documentation > Applications > APSIN > PAT message switch >



Name

Date modified

Type



PRJ-NCIC-MESSAGE purge jobs.docx

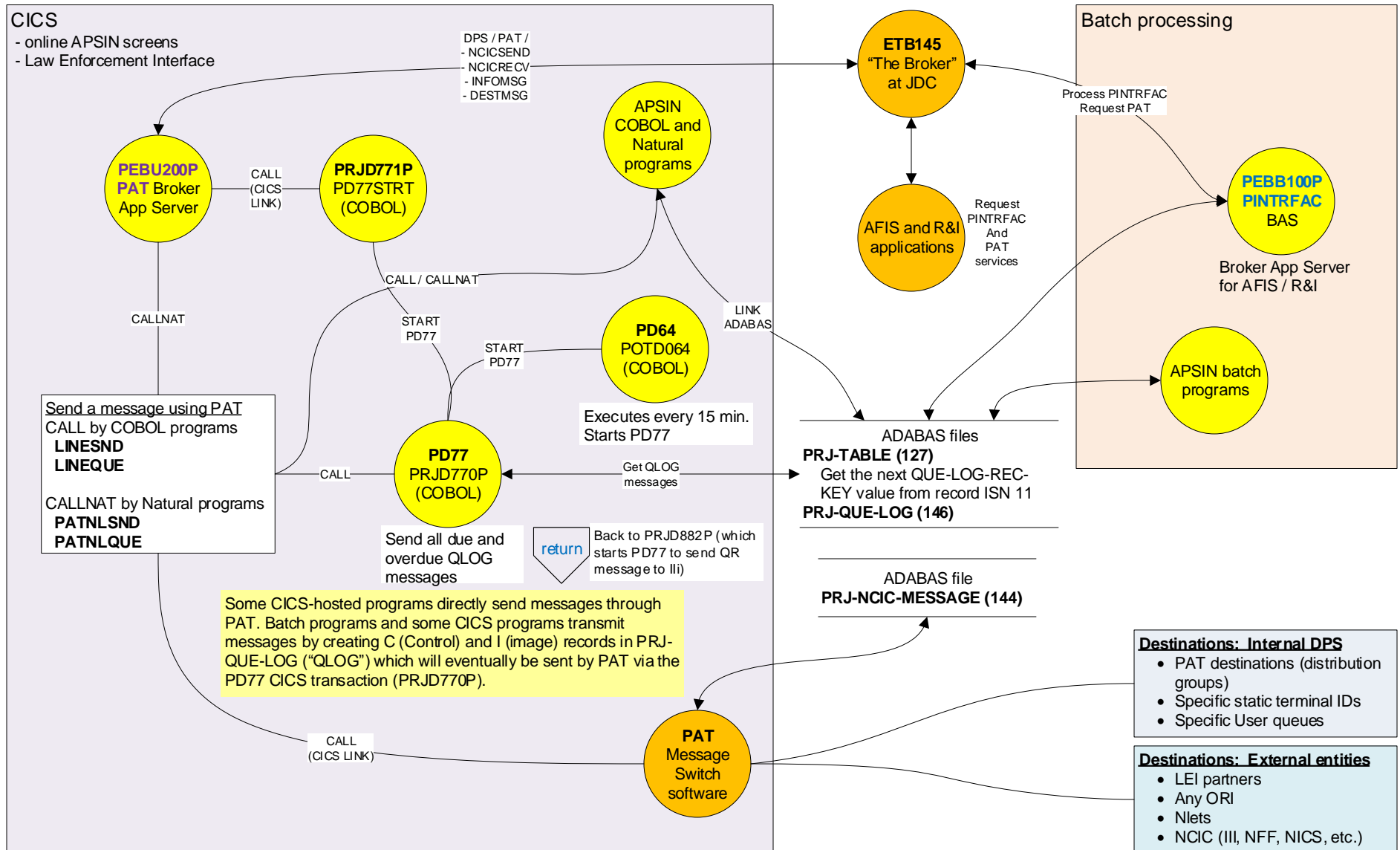
4/5/2018 12:06 PM

Microsoft Word

# DPS Interface Software - Outgoing

This simplified diagram depicts a high-level view of how the PAT message switch fits into DPS application architecture involved in sending messages out from DPS applications.

The linked page shows details about the Broker Application Servers mentioned on the current diagram: **PEBB100P** (the **PINTRFAC** BAS) and **PEBU200P** (the **PAT** BAS in CICS). It also includes the two Windows-based BASes that support requests from the mainframe.



6.3.6 PD80.1.PRJD800P

return

**PRJD800P**

Process LEI, NCIC, III, or Nlets message (via PAT/PD80)

PD80.1

**PRJ-NCIC-MESSAGE**

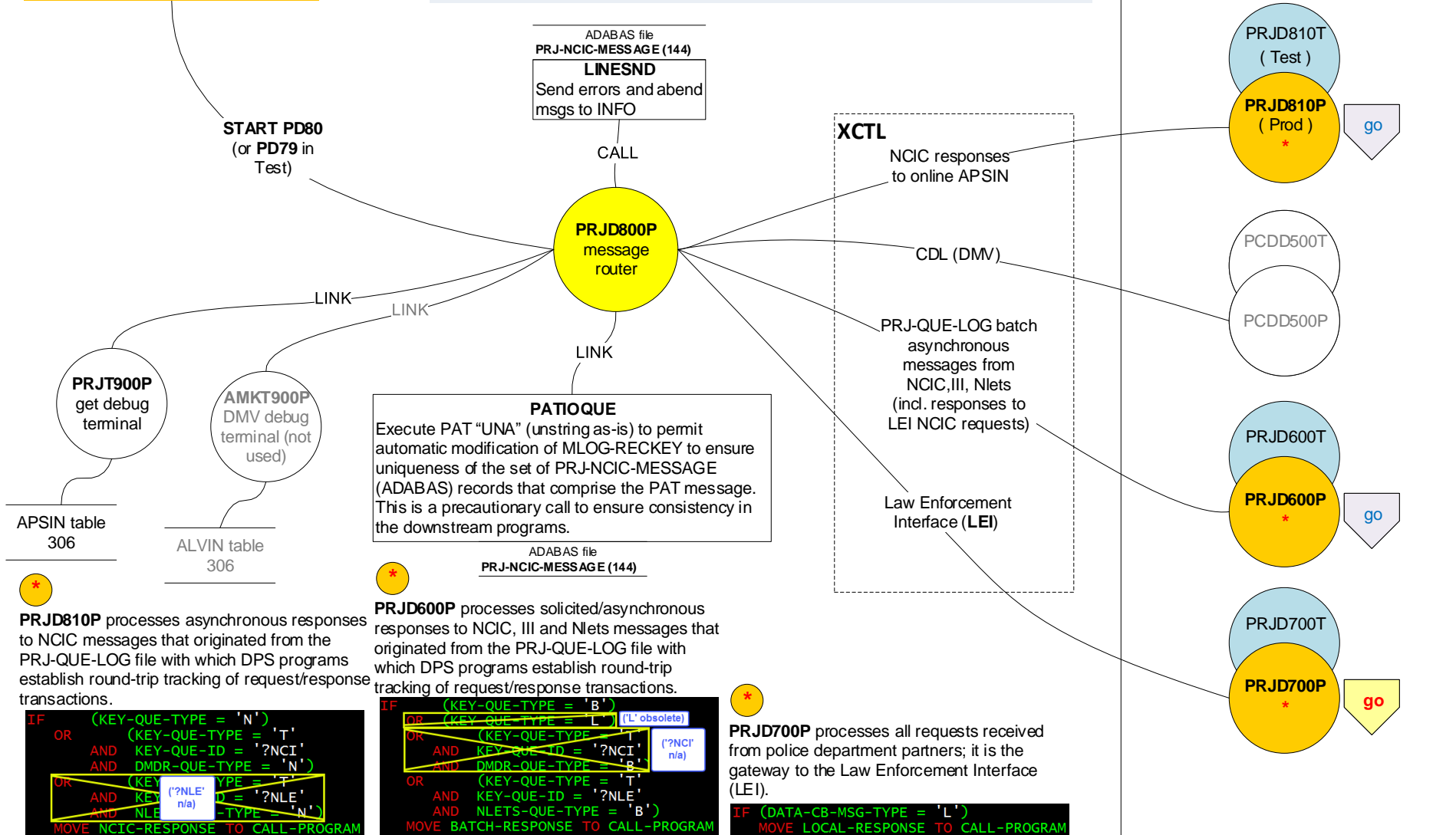
1,132 bytes passed from PAT and made available using CICS RETRIEVE

PRJD800P receives all solicited APSIN-related incoming message traffic from PAT except for the III/NFF "\$.A.xxx" messages processed by PD98/PRJD990P; and it receives all [unsolicited] requests from LEI partners.

Whenever new LEI partners are added to PAT, this program needs to be modified to include their one-byte DATA-CB-MSG-TYPE value in the "PROCESS MESSAGE" area of this program.

DFD level 1

PRJD800P paragraph:  
**A100-START-PROGRAM**  
has a long nested IF sequence that determines, based on the queue type and other flags, which program will process the message.



APSIN table 306

ALVIN table 306

\* PRJD810P processes asynchronous responses to NCIC messages that originated from the PRJ-QUE-LOG file with which DPS programs establish round-trip tracking of request/response transactions.

```

IF (KEY-QUE-TYPE = 'N')
OR (KEY-QUE-TYPE = 'T')
AND KEY-QUE-ID = '?NCI'
AND DMDR-QUE-TYPE = 'N')
OR (KEY-QUE-TYPE = 'T')
AND KEY-QUE-ID = '?NLE'
AND NLE-QUE-TYPE = 'N')
MOVE NCIC-RESPONSE TO CALL-PROGRAM
    
```

ADABAS file PRJ-NCIC-MESSAGE (144)

\* PRJD600P processes solicited/asynchronous responses to NCIC, III and Nlets messages that originated from the PRJ-QUE-LOG file with which DPS programs establish round-trip tracking of request/response transactions.

```

IF (KEY-QUE-TYPE = 'B')
OR (KEY-QUE-TYPE = 'L')
OR (KEY-QUE-TYPE = 'I')
AND KEY-QUE-ID = '?NCI'
AND DMDR-QUE-TYPE = 'B')
OR (KEY-QUE-TYPE = 'T')
AND KEY-QUE-ID = '?NLE'
AND NLETS-QUE-TYPE = 'B')
MOVE BATCH-RESPONSE TO CALL-PROGRAM
    
```

\* PRJD700P processes all requests received from police department partners; it is the gateway to the Law Enforcement Interface (LEI).

```

IF (DATA-CB-MSG-TYPE = 'L')
MOVE LOCAL-RESPONSE TO CALL-PROGRAM
    
```

return

# PRJD700P

Law Enforcement Interface gateway

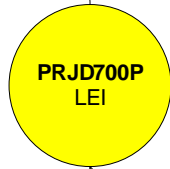
DFD level 3

PRJD700P is the entry point to the APSIN Law Enforcement Interface (LEI). Messages destined for the LEI are detected by the PAT message switch by the first two bytes of their message transmission header 'S1'. The switch dispatches these messages by starting a CICS PD80 task. In short, message processing begins with PRJD800P which passes S1 messages to PRJD700P.

PRJD700P contains a directory of all of the Natural subprograms that drive each LEI message-key (MKE) transaction. PRJD700P loads into its CICS COMMAREA the names of the LEI master Natural program PIID000P and the MKE driver program. PRJD700P passes the COMMAREA to and invokes the Natural nucleus program N5CICS using a CICS XCTL (transfer control without looking back) command.

PRJD800P (PD80)

Msgs from LEI agencies



XCTL (Test CICS)

XCTL (Prod CICS)

**NTICS**  
Natural nucleus running in Test CICS (A09TCICS aka SYSID = XAR1), invoked via CICS transid NAT2.

All LEI tasks are logged in as user PINTRFAC. If the user is a DPS programmer, LEI logs to library PINTRFAC (to utilize code in development in that library); non-programmer users are logged to library PDPSINTR (Test region executable identical to what is in Prod library PINTRFAC).

**N5CICS**  
Natural nucleus running in DPS CICS (A09SCICS aka SYSID = DPS), invoked via CICS transid NPAJ.

LEI logs on as user PINTRFAC to library PINTRFAC.

LINK

CALL

LINK ADABAS

<b>XTPR001P</b> Juneau data center date routine
<b>PRJS001P</b> Get ADABAS file passwords.
<b>ADABAS</b> Interact with the APSIN ADABAS database.
<b>PRJS001P</b> LINK to this program to retrieve the read or write password for a specified APSIN ADABAS file (does not require calling PATLDTWA first).
<b>PRJD750P</b> Get the next unique ID for a new set of related PRJ-QUE-LOG records (does not require calling PATLDTWA first).
<b>PATIOMOD</b> The program "acknowledges" the PRJ-NCIC-MESSAGE record using the <b>PATIOMOD CHG</b> command which changes the message status from N (not read) to D (displayed).
<b>PATCLOSE</b> Close ADABAS session.

**PATUCTRN**  
Convert message to uppercase.

**PATLDTWA**  
For a program about to be invoked using CICS LINK, establish addressability of parameter area(s) being passed by copying their addresses into the CICS Transaction Work Area (TWA).  
**All EXEC CICS LINK below are preceded by calling PATLDTWA.**

**LINESND**  
Send errors and abend msgs to INFO

ADABAS file  
**PRJ-NCIC-MESSAGE (144)**

ADABAS files

**PRJ-QUE-LOG (146)**  
C and I records created to manage responses and NCIC interactions

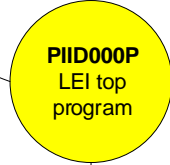
**PRJ-SECURITY (134)**  
Gets agency ID to be used on the QLOG records

**PRJ-TABLE (127)**  
In Test CICS, checks if transaction is submitted by a DPS programmer

PIID000P is the Natural LEI entry point. It FETCHes the "driver program" for the specified transaction type; the driver in turn uses CALLNAT to execute all other programs.

EXEC

EXEC

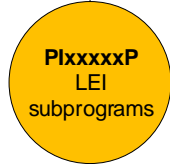


go

**DPS**  
Responses from NCIC will ultimately be processed by **PINU200P**.

Responses from NCIC

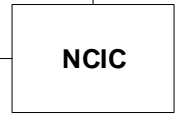
CALLNAT



CALLNAT



queries and updates



go

The LE Interface is extensively documented outside of this Visio document. The linked information shows a few of the high points.

6.3.8 PD80.3.PRJD700Pa



Highlights of Law Enforcement Interface documentation

PRJD700P

anchqqsan01 > Orgdata > SWS > SIS > Documentation > Applications > APSIN > External Interfaces > LEI Local Law Enf Interface > Flow Charts >

- Person Match, Add, Merge
- ALVIN APSIN Interface.vsd
- Arcticle Inquiry (QA QAL).vsd
- Arcticle Maint (EA MA XA LA CA).vsd
- Arrest Trans (UAR XAR).vsd
- Case Validation (QCA).vsd
- Citation Maint (ECI MCI DCI).vsd
- Citation Query (QC, QCP).vsd
- Corrections Trans (UCD XCD).vsd
- Court Filing Trans (UCF XCF).vsd
- Court Judgement Trans (UCJ X CJ).vsd
- DMV Vehicle Inquiry (QVI).vsd
- Gun Inquiry (QG QGL).vsd
- Gun Maint (EG MG XG LG CG).vsd
- Message Types Flow Charts.vsd
- MS061 Sending EHN messages.vsd
- Person Maint (EPD, MPD).vsd
- Person Query (QPA, QPB, QPC, QPD, QPL).vsd
- Prosecutor Trans (UPR XPR).vsd
- Query ATN for SID.vsd
- Query Case Validation.vsd
- Query Docket Number Validation.vsd
- Query Person Short.vsd
- Query Vehicle Short.vsd
- Securities Inquiry (QS QSL).vsd
- Securities Maint (ES MS XS LS CS).vsd
- SID ATN Validation (QAT).vsd
- SID ATN Validation (QCD).vsd
- Stolen and Recovered Articles Update Data.vsd
- Stolen and Recovered Guns Update Data.vsd
- Stolen and Recovered Vehicles Update Data.vsd
- Vehicle Inquiry (QV QVL).vsd
- Vehicle Maint (EV MV XV LV CV).vsd
- wolfe driver called programs.vsd
- WW, Missing Persons, Locate (EOR MOR XOR COR).vsd

*Individual Visio flowcharts for each transaction type show all programs related to any LEI transaction type.*

anchqqsan01 > Orgdata > SWS > SIS > Documentation > Applications > APSIN > External Interfaces > LEI Local Law Enf Interface > Customer Documentation >

- Ch 1 Overview.pdf
- Ch 2 Property Transactions.pdf
- Ch 3 Person Transactions.pdf
- Ch 4 DMV Inquiry Transactions.pdf
- Ch 5 Vehicle Transactions.pdf
- Ch 6 Citation Transactions.pdf
- Ch 7 Court Order Transactions.pdf
- Ch 8 Arrest Transactions.pdf

*These files are a full set of Customer technical documentation.*

anchqqsan01 > Orgdata > SWS > SIS > Documentation > Applications > APSIN > \_catalogs and inventory >

- zOld
- APSIN Code Tables.txt
- APSIN-ALVIN interface overview.docx - Shortcut
- Catalog APSIN DMV interfaces.xlsx
- Catalog APSIN Interface LEI+Broker.xlsx
- Catalog APSIN.xlsx

*The Excel workbook catalogs the top-level components of the LEI.*