Virginia Department of Emergency Management

Regional Advisory Committee (RAC) Meeting

Date: September 15, 2022

Agenda

- Call Meeting to Order
- Message from RAC Leadership
- MSAG & ALI Maintenance After NG9-1-1 Go-Live
- 9-1-1 Cartoon
- RAC Workgroup Updates
- Old Business
- New Business
- Public Comment
- Adjourn Meeting

Virginia Department of Emergency Management

Call Meeting to Order and Message from Leadership

Virginia Department of Emergency Management

MSAG & ALI Maintenance after NG9-1-1 Go Live

Presentations to Inform & Gather Feedback

Role of MSAG & ALI maintenance after go live and options

- ✓ **Plan overview at 9-1-1 Board July 14 (AT&T and NGS Staff)**
- Presentations to 9-1-1 Board Committees
  - **Finance August 1 10 am (NGS Staff)**
  - **PSAP Grant September 1 (AT&T / NGS Staff)**
  - RAC September 15pm (AT&T / NGS Staff)
- **Virginia NG9-1-1 GIS User group meeting presentation August 10 2pm** and discussion Sept 14 2pm (AT&T / NGS Staff)
- **Webinars to Virginia localities and stakeholders in August (hosted by AT&T) Monday August 1 1pm and Wednesday August 17 3pm**
- Other meetings of stakeholders that may occur in Aug or Sept.

Standard 9-1-1 Capabilities and Services for VA PSAPs

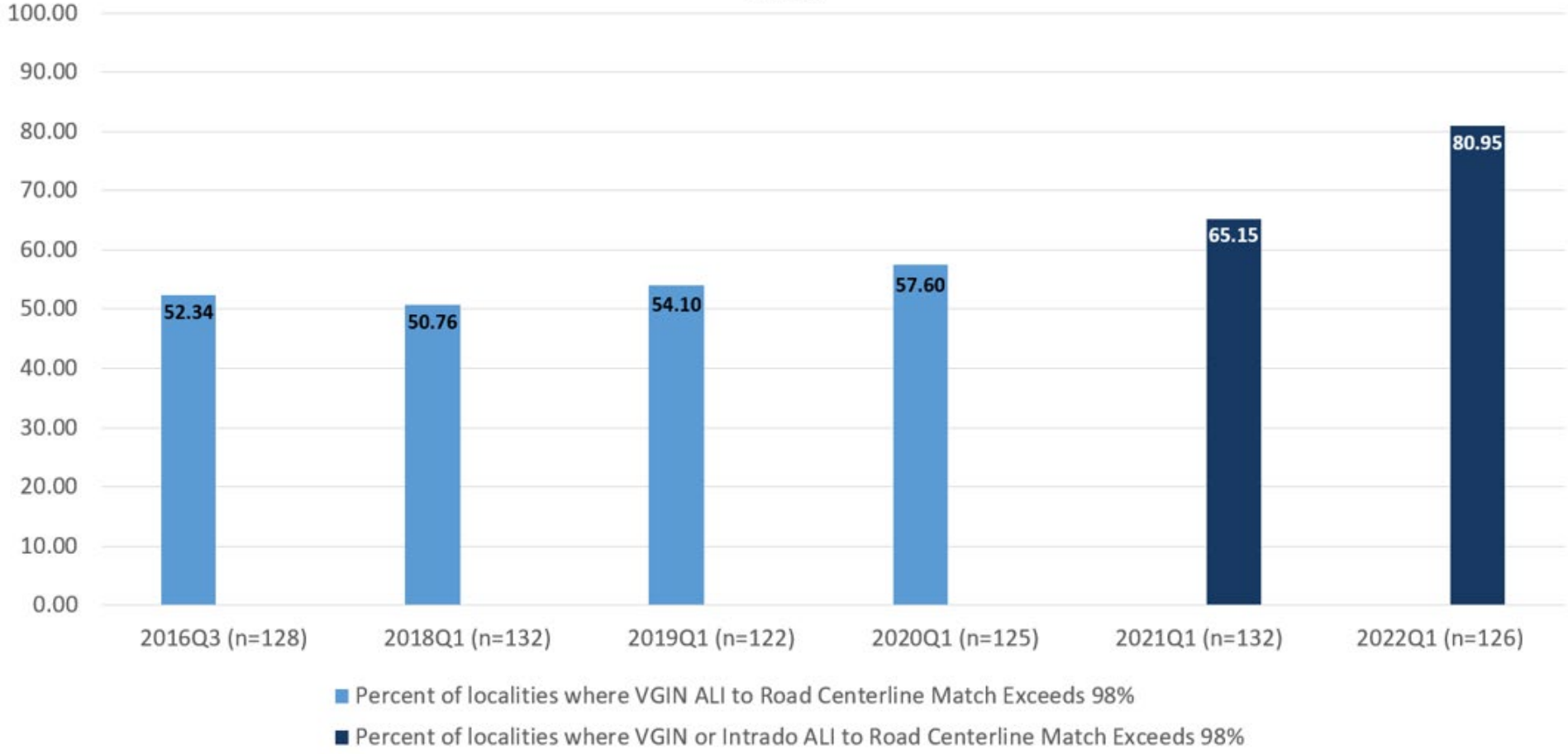
- C. Call Routing and Delivery

All PSAPs must have a process for ensuring maintenance of the Automatic Number Information (ANI)/Automatic Location Information (ALI) and Master Street Address Guide (MSAG) databases. 9-1-1 calls originating from a landline phone are currently routed and delivered to the appropriate PSAP through the utilization of data in the ANI, ALI and MSAG databases. Calls placed to 9-1-1 through wireless devices are routed and delivered to a PSAP based on cellular tower sector routing databases. PSAPs must periodically work with 9-1-1 service providers to conduct test calls and validate the databases. SOPs detailing how to accomplish testing, error reporting and data correction or refinement must be developed and followed to ensure accurate routing and delivery of 9-1-1 calls.

- D. Data Synchronization

All PSAPs should synchronize their GIS with MSAG and ALI databases. Having MSAG, ALI, and GIS datasets in agreement is crucial to providing telecommunicators the information they need to correctly verify the location of a caller and provide proper emergency response. NENA 71-501 states that GIS, MSAG and ALI data should have a match rate of at least 98% with one another, and that all of these datasets should be maintained in a manner so that the match rate is not lower than 98%.

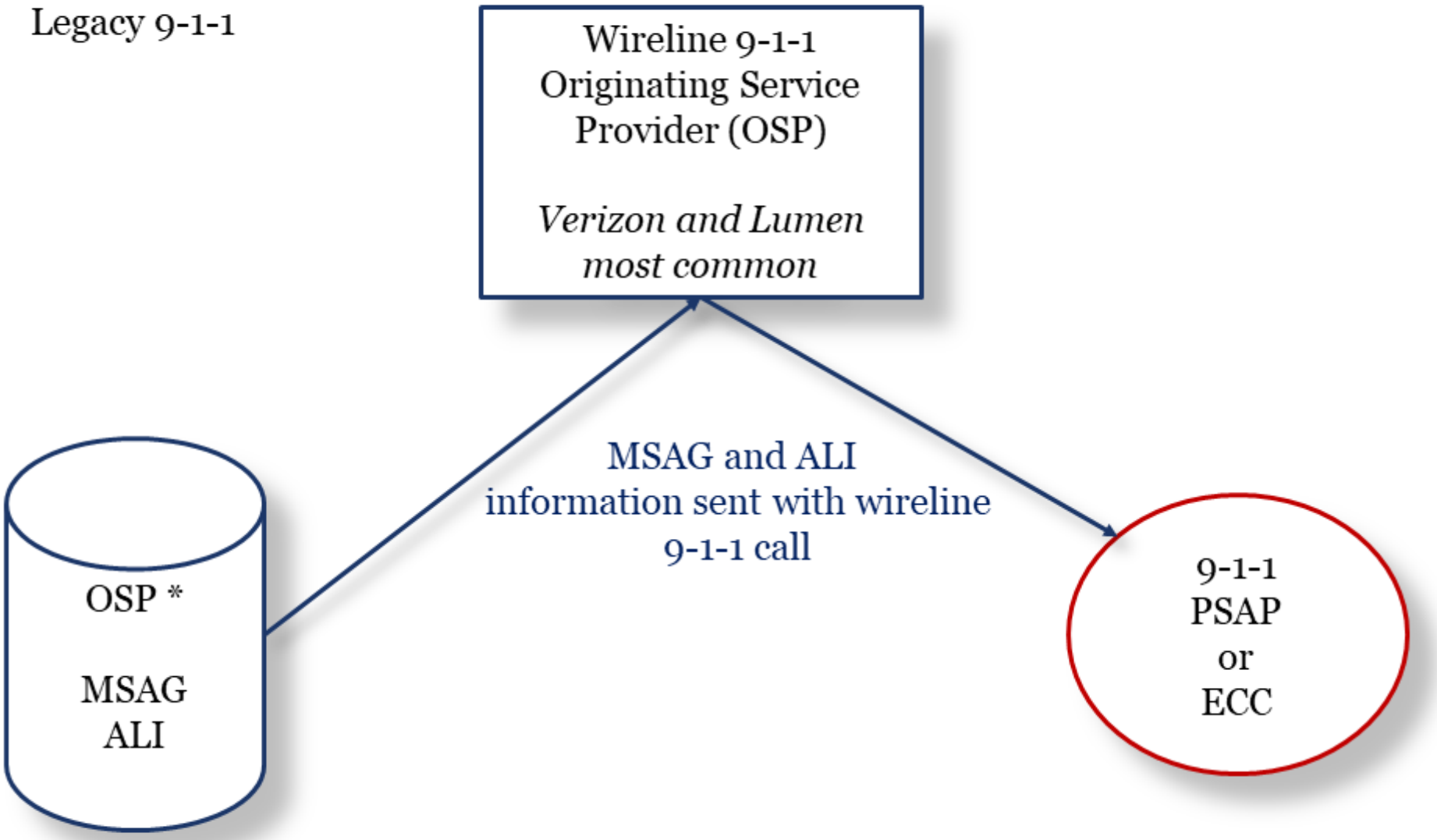
Percent of Virginia Localities Where ALI to GIS Road Centerline Match Exceeds 98%



MSAG and ALI Maintenance and NG9-1-1

- With NG9-1-1 Go Live, MSAG and ALI moves to AT&T/Intrado for use during NG9-1-1 transition phase
- Transition phase continues until originating service providers (OSPs) adapt systems to end-state i3 Location Information Servers (LIS) and Location Validation Function (LVF)
- Therefore localities must continue to maintain MSAG information so OSPs can validate subscriber records and maintain interoperability between legacy 9-1-1 and Next Generation 9-1-1 components

Legacy 9-1-1


Wireline 9-1-1
Originating Service
Provider (OSP)
Verizon and Lumen
most common
MSAG and ALI
information sent with wireline
9-1-1 call
OSP *
MSAG
ALI
9-1-1
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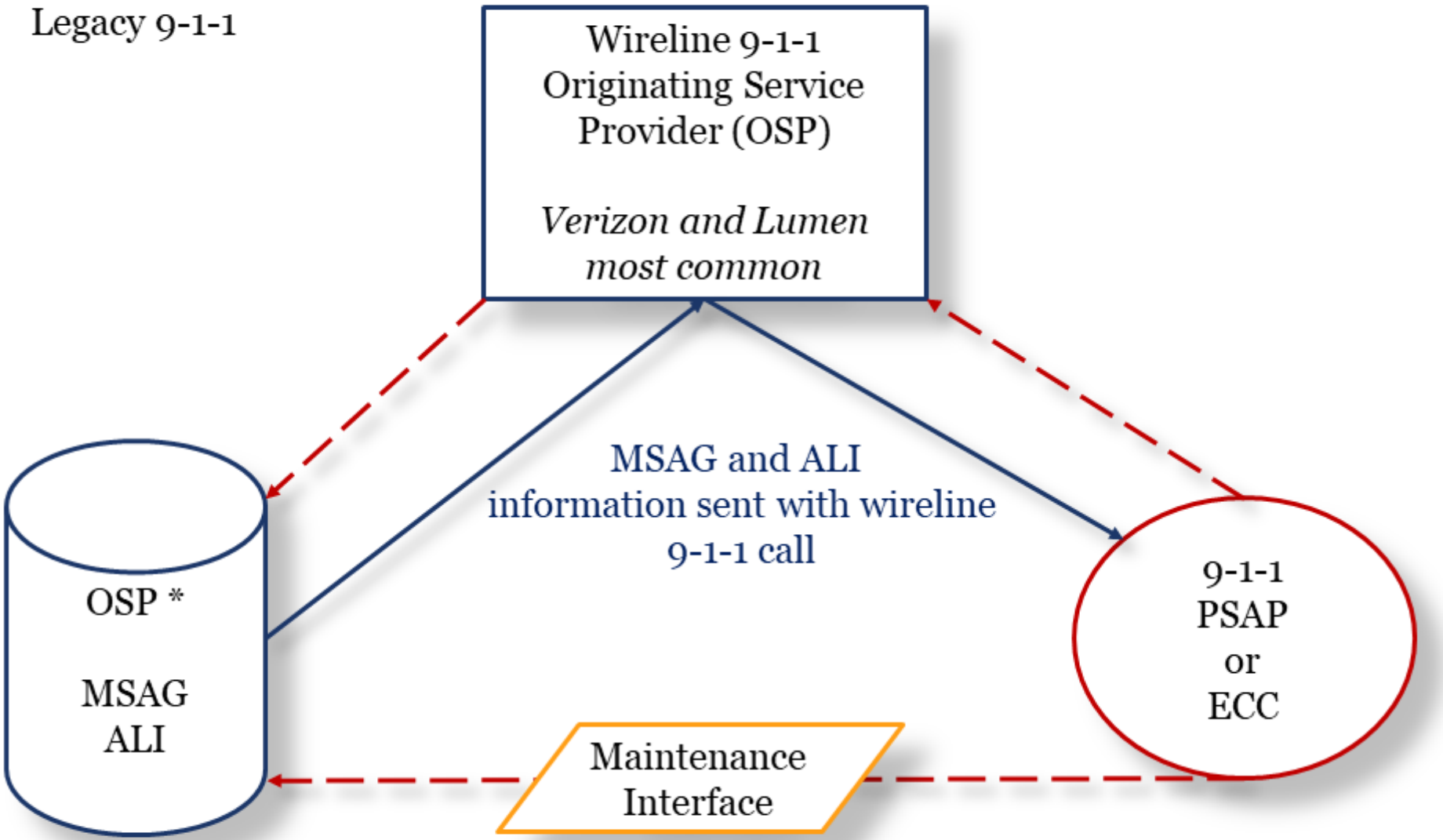
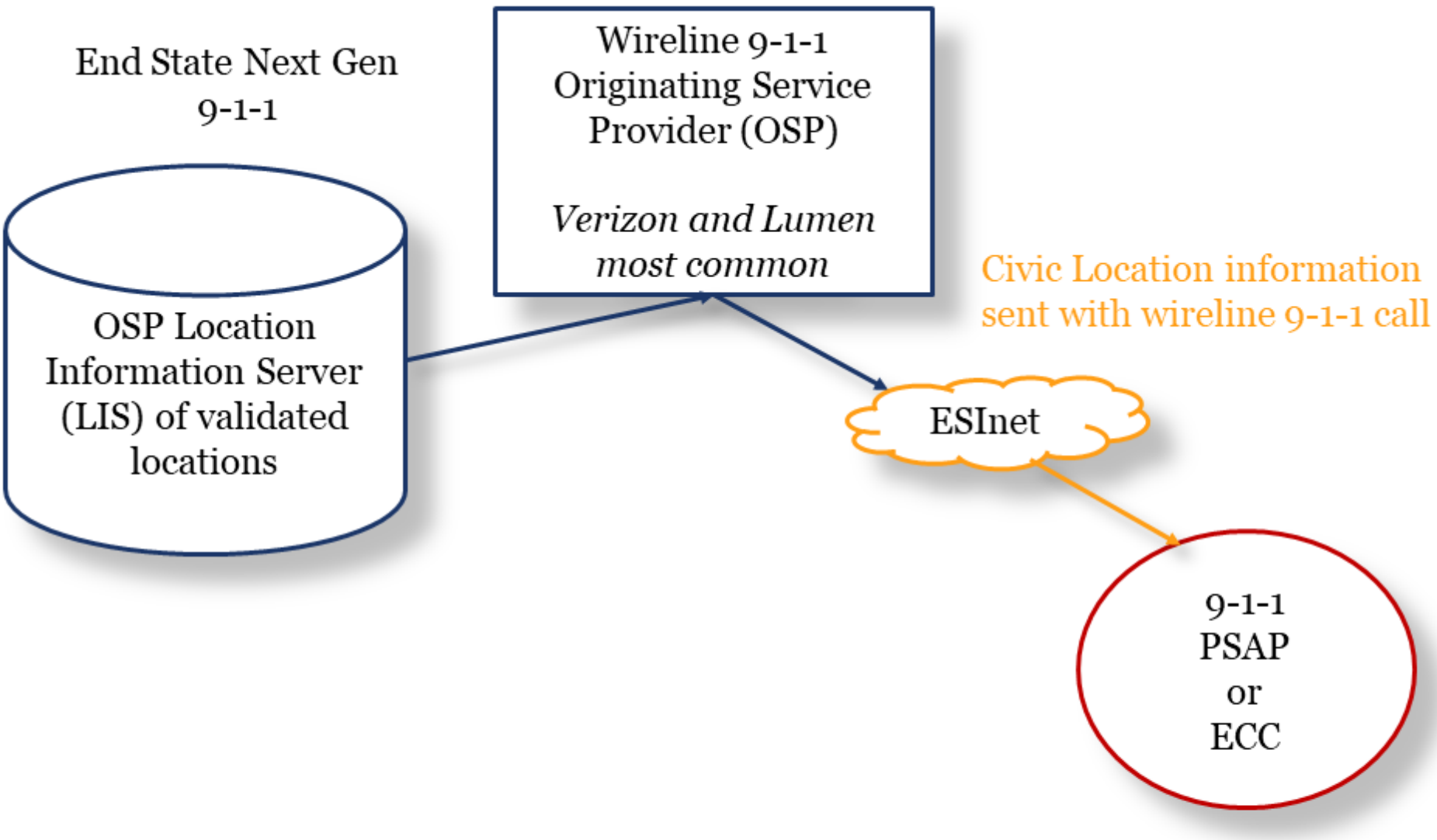
or
ECC

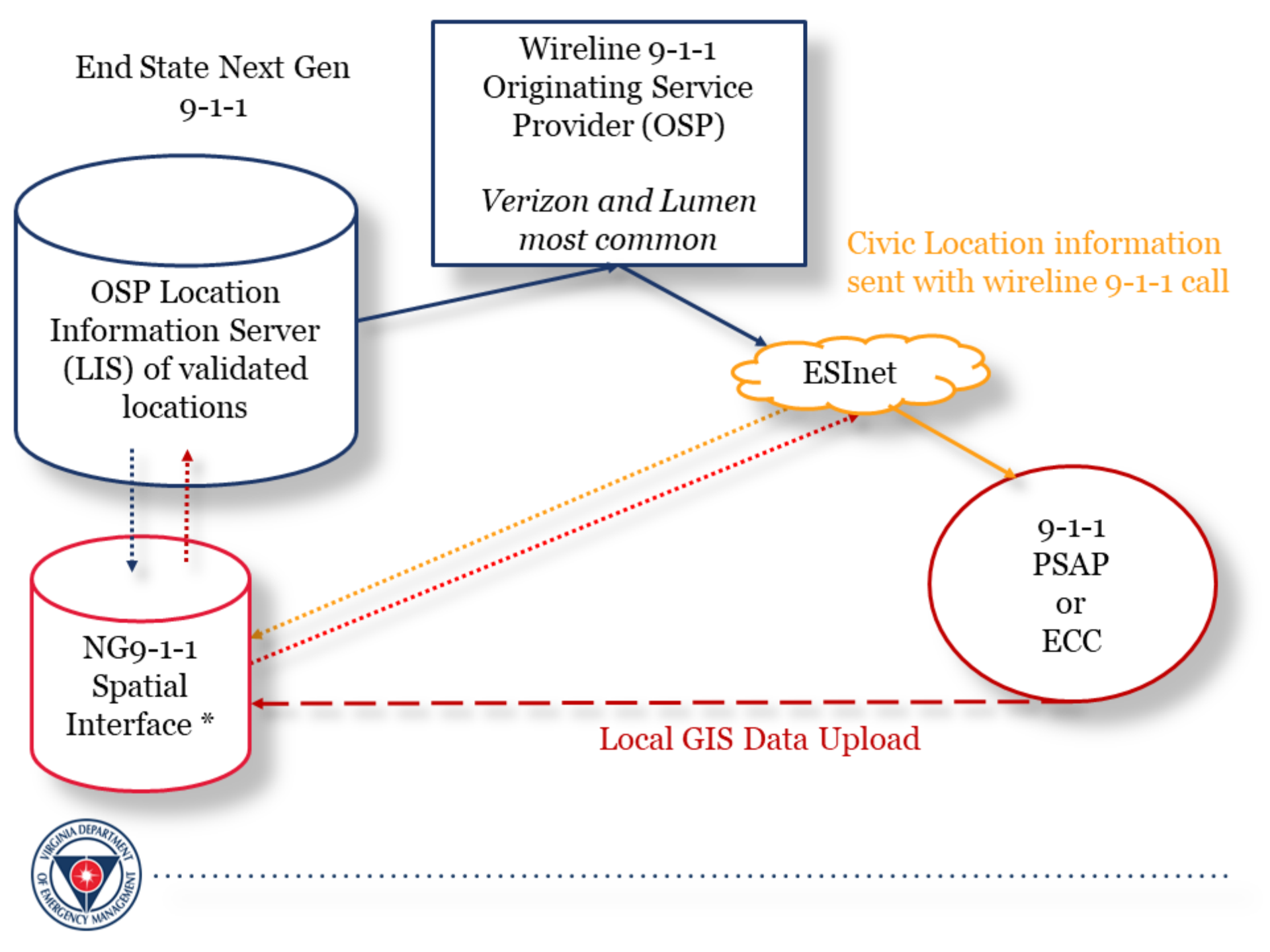
Legacy 9-1-1



9-1-1 PSAP or ECC maintains information in MSAG & ALI through provider or 3rd party interface

End State Next Gen 9-1-1

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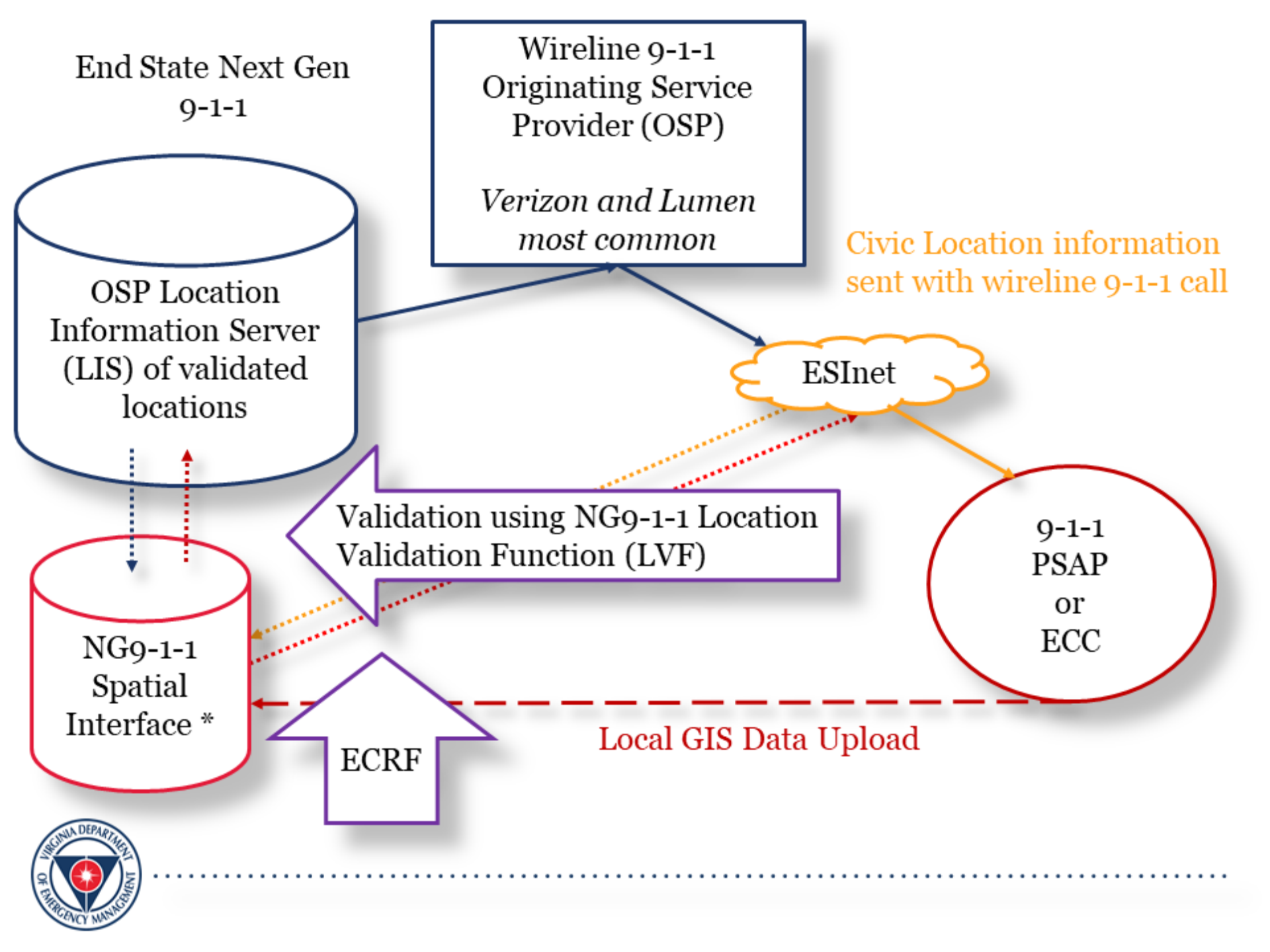
Wireline 9-1-1 Originating Service Provider (OSP)
Verizon and Lumen most common
Civic Location information sent with wireline 9-1-1 call
OSP Location Information Server (LIS) of validated locations
ESInet
9-1-1 PSAP or ECC
NG9-1-1 Spatial Interface *
Local GIS Data Upload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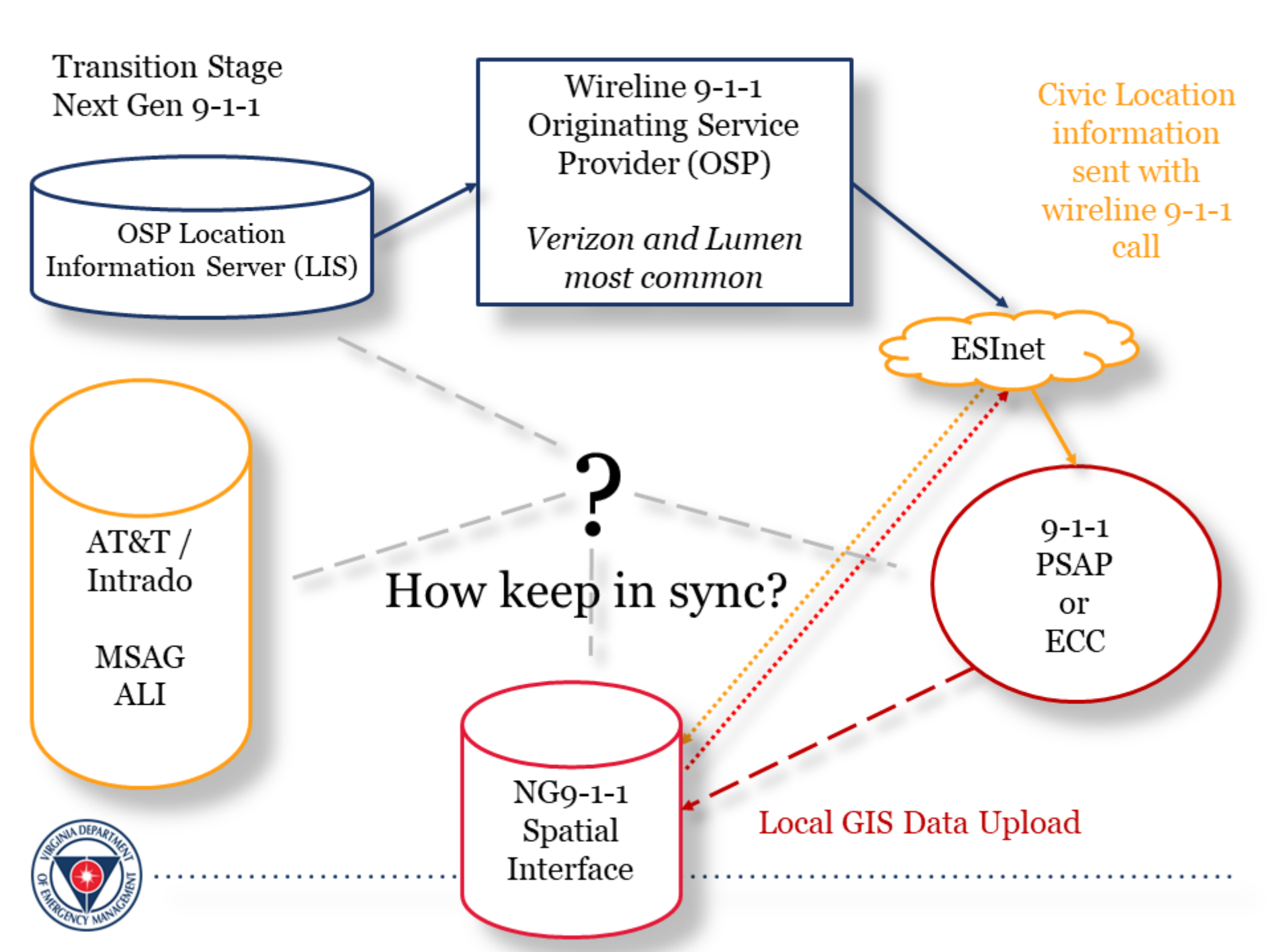
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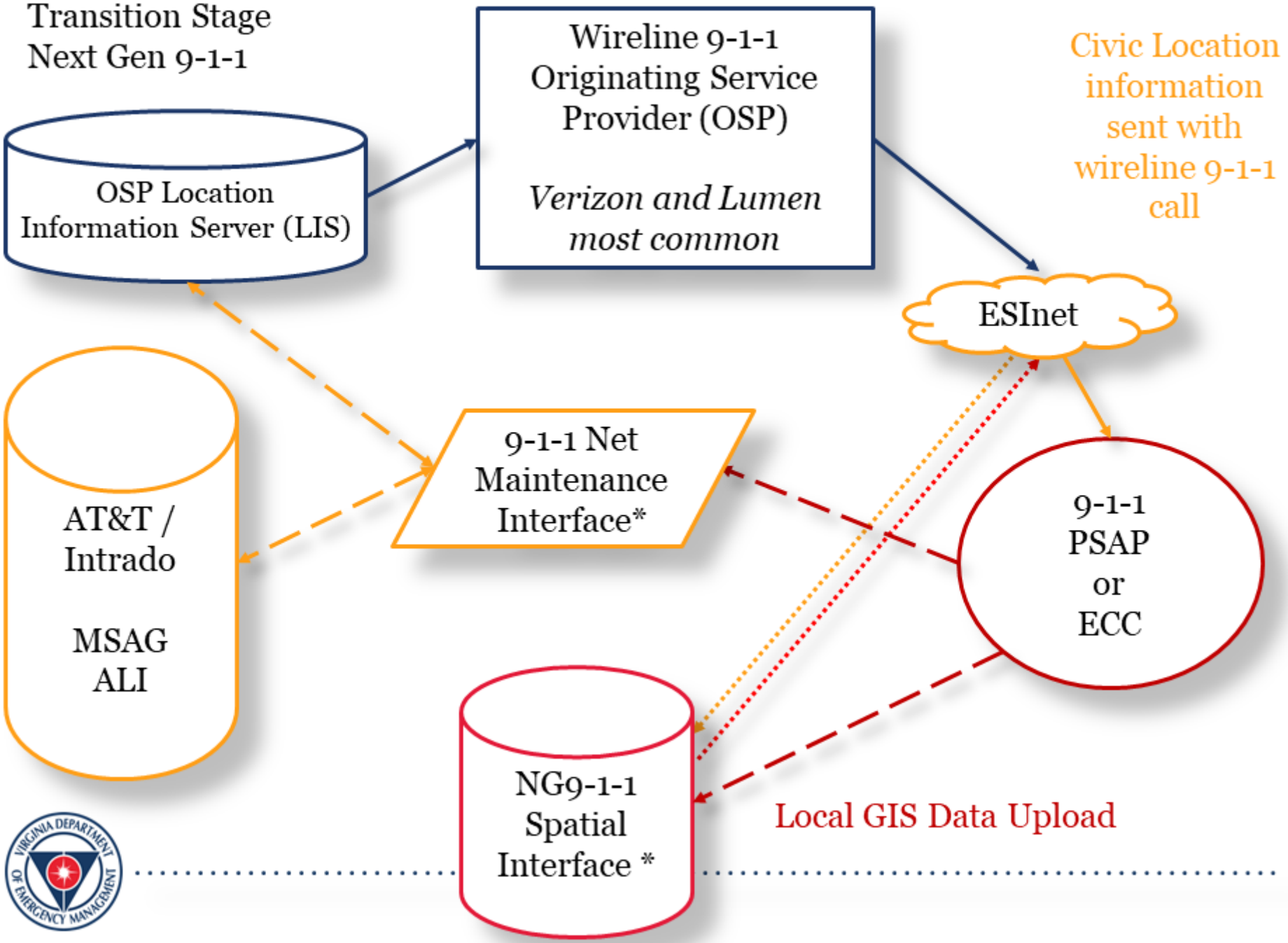
ESInet
AT&T / Intrado
MSAG
ALI
?
How keep in sync?
9-1-1 PSAP or ECC
NG9-1-1 Spatial Interface
Local GIS Data Upload

MSAG and ALI Maintenance and NG9-1-1

- Maintain MSAG and ALI data through AT&T process
  - 9-1-1 Net (swivel-chair) included in existing pricing
  - Transitional Data Management Service (TDMS) optional at additional cost for localities or Virginia-wide option.
- Maintain GIS data in NG9-1-1
  - Regular uploads to EGDMS
- Doing so keeps high level of synchronization achieved during NG9-1-1 Go Live and will reduce effort when the transition phase ends

9-1-1 Net

- AT&T uses Intrado's **9-1-1 Net** application and arranges training by locality after go-live
  - **Included** with cost of initial NG9-1-1 Deployment
  - Some PSAPs currently use 9-1-1 Net with A911 and Verizon
  - Method of sending MSAG adds, updates, and deletes to Intrado for review
    - Intrado syncs information with OSPs
    - Provides workflow to send and respond to discrepancy reports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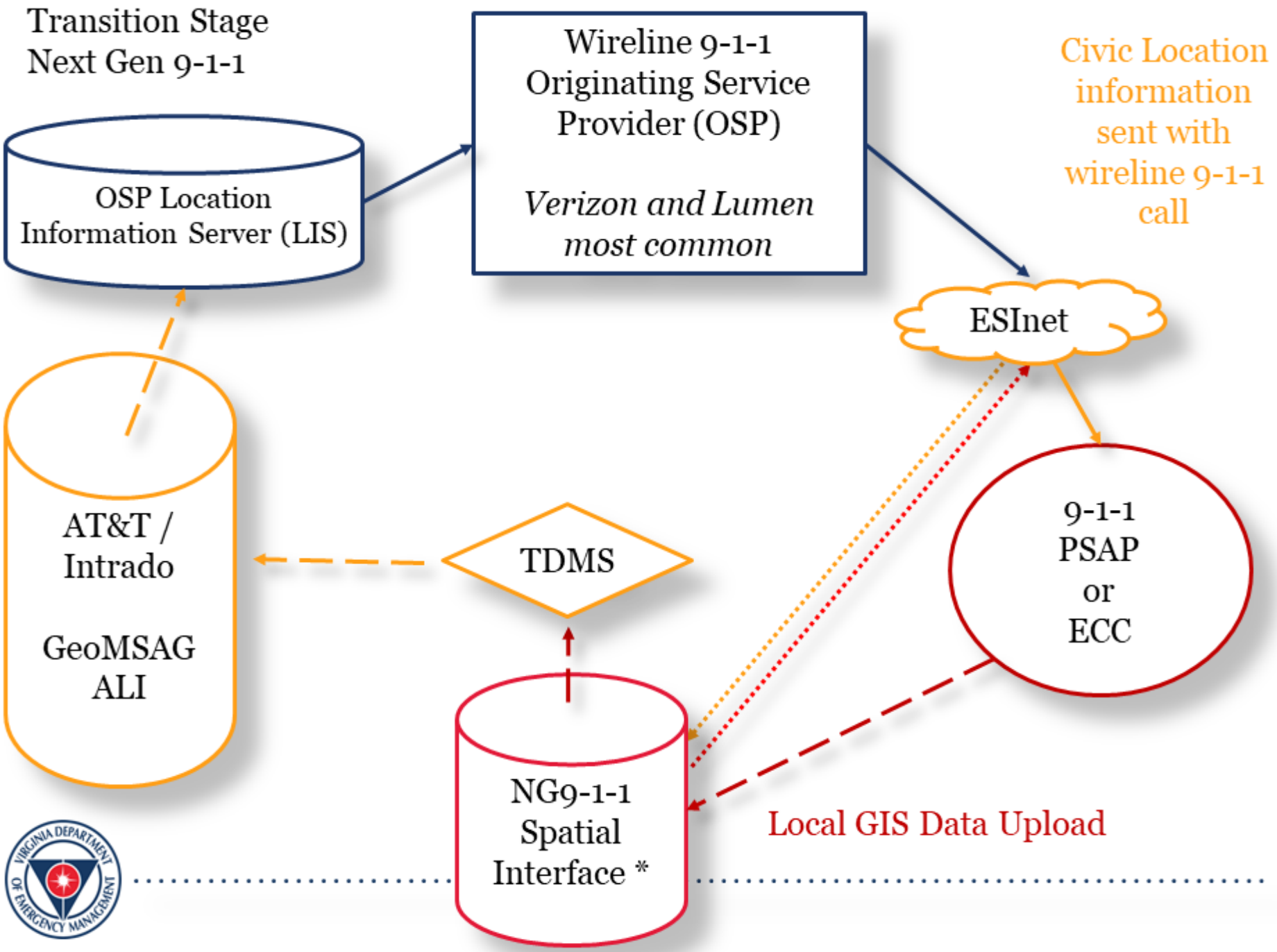
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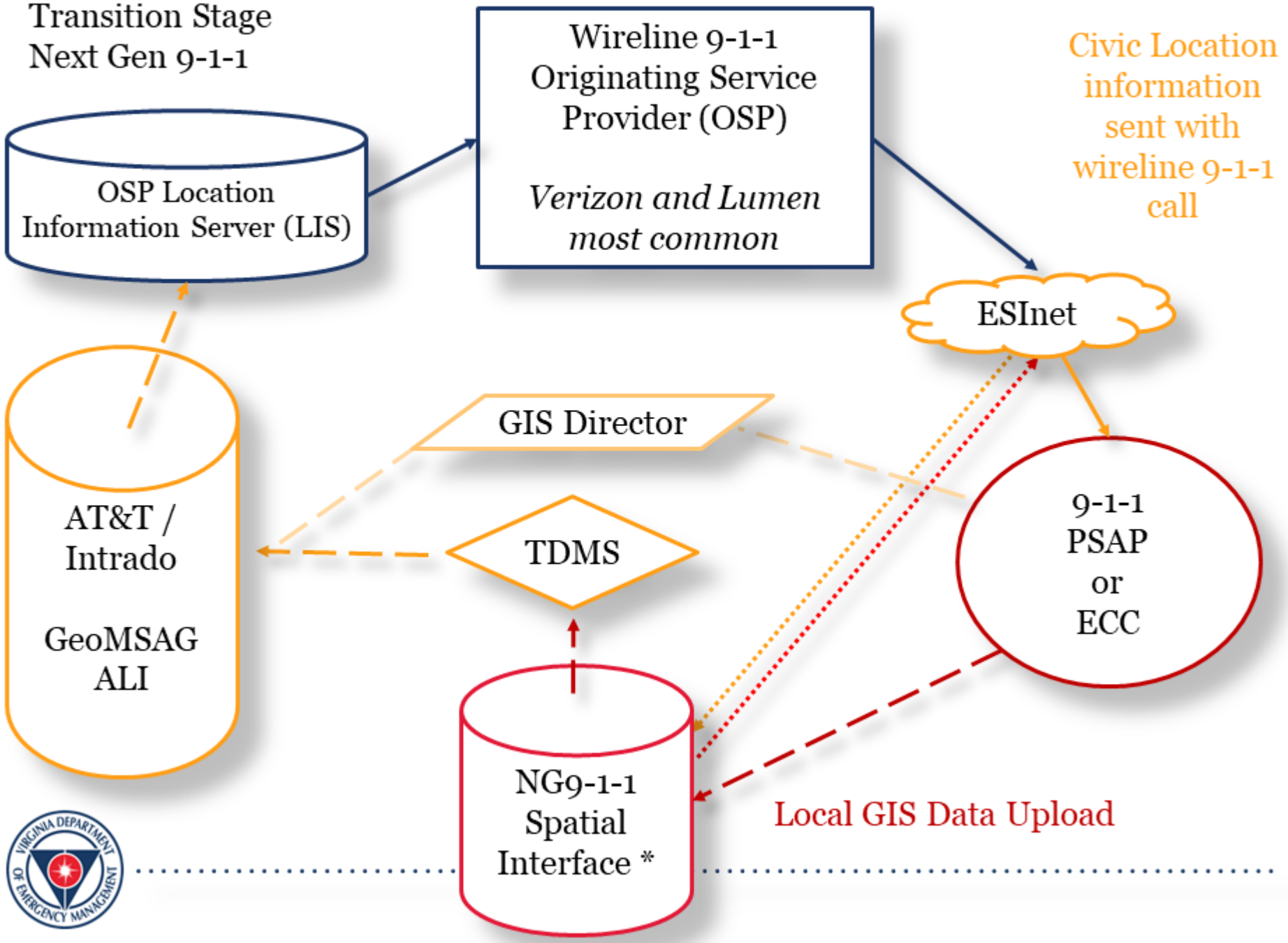
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Local GIS Data Upload

Transitional Data Management Service (TDMS)

- Intrado offers **TDMS** as an option at additional cost so localities do not have to use 9-1-1 Net to maintain a separate tabular MSAG
- Intrado builds a **GeoMSAG** from GIS road centerlines loaded into EGDMS and uses it as a single version of the truth

  Carrier subscriber records validate against the GeoMSAG
- Uses **GIS Director** collaboration tool (NG9-1-1 map-based replacement for 9-1-1 Net) for discrepancies and error resolution

  E.g., review cases where a GeoMSAG from newly uploaded GIS data causes an error against existing carrier subscriber records
- TDMS implementation works well when GIS, MSAG, and ALI are highly synchronized

Transitional Data Management Services Benefits

The Service will allow Customer's GIS data to serve as the authoritative source for 9-1-1 address validation.

The Service provides the following benefits:

- Operational efficiency – 9-1-1 address management using GIS data
- Highest NG9-1-1 data accuracy - continuous GIS to ALI synchronization
- No changes required for carriers - support of legacy TSP provisioning and ALI
- Full i3 readiness – Streamlines deployment to i3 Routing Services

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AT&T Business

TDMS Locality Option

- Fairfax Contract lists locality pricing
- Localities may opt in with AT&T
- Localities pay on their own
- Has not come up as a reimbursable item
- No Virginia localities have implemented on their own

Attachment 4 - GIS Data Management Transitional Services (004) Contract 4400007825

GIS Data Management Transitional Services

Line Item	Description	Total Discounted Price MRC	NRC
A4-1	GIS - NG911 Transitional Data Management One-time Fee, 1st 200,000	-	$27,000.00
A4-2	GIS - NG911 Transitional Data Management One-time Fee, each addl person	-	$0.048
A4-3	GIS - NG911 Transitional Data Management Monthly Recurring, Less than 200,000 persons	$1,608.00	-
A4-4	GIS - NG911 Transitional Data Management Monthly Recurring, 200,000 - 1,000,000 persons, per person	$0.008	-
A4-5	GIS - NG911 Transitional Data Management Monthly Recurring, 1,000,000 - 5,000,000 persons, per person	$0.008	-
A4-6	GIS - NG911 Transitional Data Management Monthly Recurring, >5,000,000 persons, per person	$0.008	-
A4-7	GeoMSAG Replacement Svc One-time Fee, 1st 200,000 persons	-	$19,200.00
A4-8	GeoMSAG Replacement Svc One-time Fee, each addl person	-	$0.048
A4-9	Additional GIS to MSAG/GIS to ALI Match Rate Validation Report, each	-	$1,200.00
A4-10	GIS Routing Accuracy Report (per report)		$2,000.00
A4-11	Training and other support service fees for GIS support services		$120/hr

TDMS Virginia Option

- NGS received a quote for state-wide service August 2021
  - No initial non-recurring costs
  - Monthly recurring based on population deployed for immediate benefits
    - $0.0072 per person
    - Max $0.0072 x 6,500,000 (AT&T quote figure) = $46,800 per month when all Virginia PSAPs deployed ($561,600 per year)
  - Monthly cost continues for duration of i3 transition period

How are you going to keep things synchronized?

- **9-1-1 Net** works well for localities that:
  - Have existing maintenance workflows, roles, and responsibilities
  - Have previously used 9-1-1 Net
  - Do not have many adds and/or edits
  - No additional cost
  - Do not mind dual-maintenance / swivel chair

- **TDMS Solution** works well for localities that:
  - Do not have existing maintenance workflows, roles, and responsibilities
  - Have not previously used 9-1-1 Net
  - Have many adds and/or edits
  - Regularly load GIS address points and road centerlines to EGDMS
  - Additional cost
  - Desire streamlined data maintenance

9-1-1 Services Board 10 November 2022

Recommendation to Virginia 9-1-1 Services Board regarding TDMS for Virginia Option with data and input from stakeholders

- What is the level of understanding of Virginia PSAPs & stakeholders about MSAG & ALI maintenance requirements after NG9-1-1 go live?
- Do Virginia 9-1-1 stakeholders believe there is a benefit for everyone to use TDMS?
- Does providing TDMS reduce risk or anxiety of everyone being on a shared system?
- Is the benefit worth the cost of up to $561,600 per year until all OSPs move to i3?
- If there is not interest in a Virginia approach to TDMS, should the Board fund PSAPs that want to use TDMS in whole or in part (one-time or ongoing costs) based on the Fairfax contract price list?

MSAG & ALI Maintenance after NG9-1-1 Go Live

Goals and Background

1) Inform stakeholders of requirements

Continued maintenance is required during 9-1-1 ecosystem transition from legacy 9-1-1 to Next Generation 9-1-1, including OSPs

2) Gather feedback about options

AT&T / Intrado support 9-1-1 Net (included) and Transitional Data Management Service (TDMS) (additional cost) options

* Develop model for stakeholder engagement & feedback

Questions

- Are the benefits worth the cost for VA?
- If not, should interested localities be funded in whole or in part?

Opportunities

- 9-1-1 Board and committees in July, Aug, Sept
- Virginia NG9-1-1 GIS User group meeting Aug
- AT&T MSAG, ALI, & TDMS discussions Aug
- Other meetings that may occur in Aug or Sept

Status

Planned Presentation Opportunities

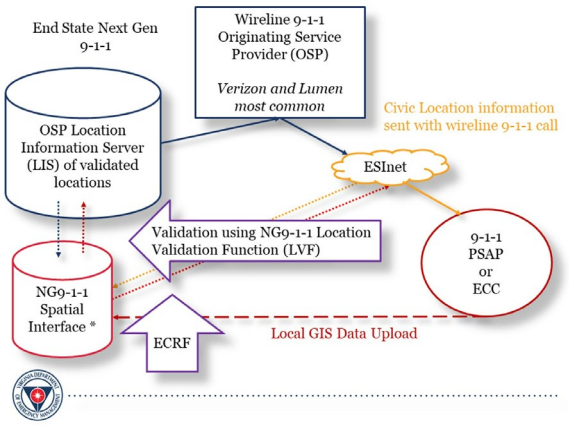
- ✓ Plan overview at 9-1-1 Board July 14
- ✓ Finance Committee August 1
- ✓ AT&T Webinar August 1
- ✓ Virginia NG9-1-1 GIS User group meeting presentation August 10
- ✓ AT&T Webinar August 17
- ✓ PSAP Grant Committee September 1
- • RAC September 15
- • 9-1-1 Board November 10

Other Opportunities

- ✓ NGS Town Hall Roanoke Aug 15
- ✓ NGS Town Hall Harrisonburg Aug 16
- ✓ NGS Town Hall Culpeper Aug 17
- ✓ NGS Town Hall Richmond Aug 18
- ✓ Virginia NG9-1-1 GIS User group discussion Aug 10 & Sept 14
- • NGS Webinar Presentation Sept *23*

Observations

Hear / see and ask questions multiple times before sharing feedback



Virginia Department of
Emergency Management

9-1-1 Cartoons

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RAC Workgroup Updates

RAC Workgroups - Leads

- Recruitment & Retention – Flournoy
- Training – Perez
- PSAP Outage – Surdam
- NG9-1-1 Phase II – Hall
- Accessibility – Herzing
- Marcus Alert – ?

Recruitment & Retention Workgroup Report

Workgroup Leads:

Jeff Flournoy (jflournoy@co.northampton.va.us)
Cheryl Buchanan (cfbuchanan@hanovercounty.gov)

Training

- Workgroup Lead:

Tamara Perez (tamara.perez@fcva.us)

PSAP Outages

- Workgroup Lead:

Michele Surdam (msurdam@pwcgov.org)

NG9-1-1 Phase II

- Workgroup Lead:

Terry Hall (hallt@yorkcounty.gov)

Marcus Alert

- Workgroup Lead - TBD

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Old Business

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New Business

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Public Comment

Upcoming Meetings/Dates

- MSAG & ALI Maintenance webinar 9/23 at 1pm
- Legislative Committee 9/27 at 1 pm
- VGIN Advisory Meeting 9/28 at 10 am
- RAC Meeting (In-Person) 10/20 at 1 pm
- Fall VA APCO Conference 10/25 - 10/28
- 9-1-1 Stakeholder Summit 11/10 at 8 am
- 9-1-1 Services Board Meeting 11/10 at 1pm
- RAC Meeting (Virtual) 11/17 at 1 pm

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Adjourn Meeting