



## **eBOL Adoption**

# Digital LTL Council Board of Directors

- 🚛 Geoff Muessig – Pitt Ohio – Chairman
- 🚛 Brian Thompson – SMC3 – Vice Chairman
- 🚛 Greg West – CH Robinson – Treasurer
- 🚛 Angelo Ventrone – Uline
- 🚛 Reed Tepper – Parker Hannifin
- 🚛 Dolly Wagner-Wilkins – Worldwide Express
- 🚛 Tim Vander Pol – Peninsula Trucking
- 🚛 Webb Estes – Estes Express Lines

# eBOL Adoption

Rank	Adopting Carriers	Annual Revenue(000)	
2	Old Dominion Freight Line	6,177,055	
4	Estes Express Lines	4,405,000	
5	TFI International	3,423,557	
6	ABF Freight	3,010,900	
7	R+L Carriers	2,864,000	
8	Saia Inc.	2,792,000	
9	Southeastern Freight Lines	1,395,600	
11	Averitt Express	1,092,210	
12	Dayton Freight Lines	1,092,210	
13	Pitt Ohio Transportation Group	874,000	
19	Daylight Transport	396,300	
20	Roadrunner Freight	338,000	
22	Ward Trucking	256,000	
	Polaris		
	<b>Total Adopted</b>	<b>28,116,832</b>	<b>57%</b>
Rank	Pledged Carriers	Annual Revenue(000)	
3	XPO Logistics	4,645,000	
14	AAA Cooper Transportation	874,000	
16	A. Duie Pyle Inc.	568,000	
21	Oak Harbor Freight Lines	338,000	
28	Dependable Highway Express	131,000	
29	Peninsula Truck Lines	106,427	
	<b>Total Pledged</b>	<b>6,662,427</b>	<b>13%</b>
	<b>Total Industry</b>	<b>49,364,219</b>	
	<b>Combined Adopted &amp; Pledged Total</b>	<b>34,779,259</b>	<b>70%</b>

# LTL Carrier Pledges



# Logistics Service Provider Pledges





# Shipper Pledges



# Technology Provider Pledges



# The Benefits of Digital API's Accrue to the Carrier, the 3PL and the Shipper

Digitization improves service and lowers costs for all parties:

- Digital standards reduces the cost for carriers, shippers and 3PLs to onboard a new business partner.
- Fewer backoffice keystrokes lowers administrative cost by allowing carriers to auto bill and auto rate shipments.
- Fewer keystroke errors leads to more accurate billing, fewer misroutes. Downstream carriers incur fewer free astray shipments which improves service and lowers cost.
- Shippers and 3PL s gain improved visibility prior to pick up which leads to fewer customer service inquiries.
- Access to shipment bill of lading information earlier in the day leads to better planning which reduces a carrier's cost to operate. Drivers spend less time inputting BOL information at pickup locations reducing stop time.
- Shippers and 3PLS gain access to real time service alerts when a shipment is delayed.
- Real time notification of price changes to the invoice (e.g. inspections, reweighs, delivery accessorials) lowers the cost to reconcile and approve invoices.
- Digitalization provides 3PLS and shippers with an opportunity to auto-resolve discrepancies between the initial quote and the final invoice.
- 3PL's spend less time on pro retrieval.





## **Workshop Contributors**

# eBOL Workshop

Name	Company
David Knight	SMC3
Dyrc McLeod	Highlander Tek
Eric Shanks	Dayton Freight
Jenny Johnson	C H Robinson
Joe Murphy	SMC3
Joe Schuh	Dayton Freight
Joe Ohr	NMFTA
Kevin Dauley	Estes Express Lines
Kyle Busdieker	Dayton Freight
Marty Martin	Echo Logistics
Mendy McLandsborough	SMC3
<b>Phil Smith</b>	<b>SMC3</b>
Robert Wood	Echo Logistics
Sam Ralat	Estes Express Lines
Tiffany Schneider	Pitt Ohio
Sean Greenberg	NMFTA
Tim Plonski	Koch Logistics

# Pickup Request/Visibility Development Group

Name	Company
April Rollins	Averitt Express
Bobby Wood	Echo Logistics
Craig Foster	Averitt Express
Curtis Garrett	Freight Plus
Eric Van Staalduinen	Saia
Hillary Drake	Liminal Network
Isaac Schwartzbauer	C H Robinson
Jen Jones	C H Robinson
Jenny Johnson	C H Robinson
Jeremy Turner	Arc Best
Jessica Siemer	Total Quality Logistics
Joe Ohr	NMFTA
Joe Schuh	Dayton Freight
Josh Ebersviller	ABF
Lance Healy	Freight Facts
Mark Hampton	ABF
Marty Martin	Echo Logistics
William McClung	T Force Freight
Michelle Kolster	Blue Grace
Ivy Nichols	Estes Express Lines
Sam Ralat	Estes Express Lines
Rohit Lal	Saia
Sean Greenberg	NMFTA
Tina Appleyard	Arc Best

# Pickup Request/Visibility Review Group

Name	Company
Andrew Russ	Evans Transportation
Chris Adderton	CSCMP
Curtis Garrett	Freight Plus
Dave Brajkovich	Polaris Transport
Dyrc McLeod	Highlander Tek
Erica Orr	Blue Grace
Joe Ohr	NMFTA
Michael Owings	Southeastern Freight Lines
Mike Ullrich	Kleinschmidt
Mike Zupon	Ward Transportation
Phil Smith	SMC3
Scooter Sayers	Sayer Logistics
Sean Greenberg	NMFTA
Tim Plonski	Koch Logistics
Tim Vander Pol	Peninsula Trucking
Wendy Zimmaro	Pitt Ohio

# In Transit Visibility

Name	Company
April Rollins	Averitt Express
Craig Foster	Averitt Express
Erica Orr	Blue Grace
Hillary Drake	Liminal Network
Jeff Dahl	Koch Logistics
Jenny Johnson	C H Robinson
Jeremy Turner	Arc Best
Joe Ohr	NMFTA
Josh Ebersviller	ABF
Lance Healy	Freight Facts
Mark Hampton	ABF
Noelle Brault	Southeastern Freight Lines
Phil Smith	SMC3
Andrea Rebutan	Daylight Transportation
Reed R Tepper	Parker Hannifin
Tiffany Schneider	Pitt Ohio
Scott Greacen	Pitt Ohio
Sean Greenberg	NMFTA
Tim Plonski	Koch Logistics
Tina Appleyard	Arc Best
Kara Wood	Estes Express Lines



# Preliminary Freight Charges

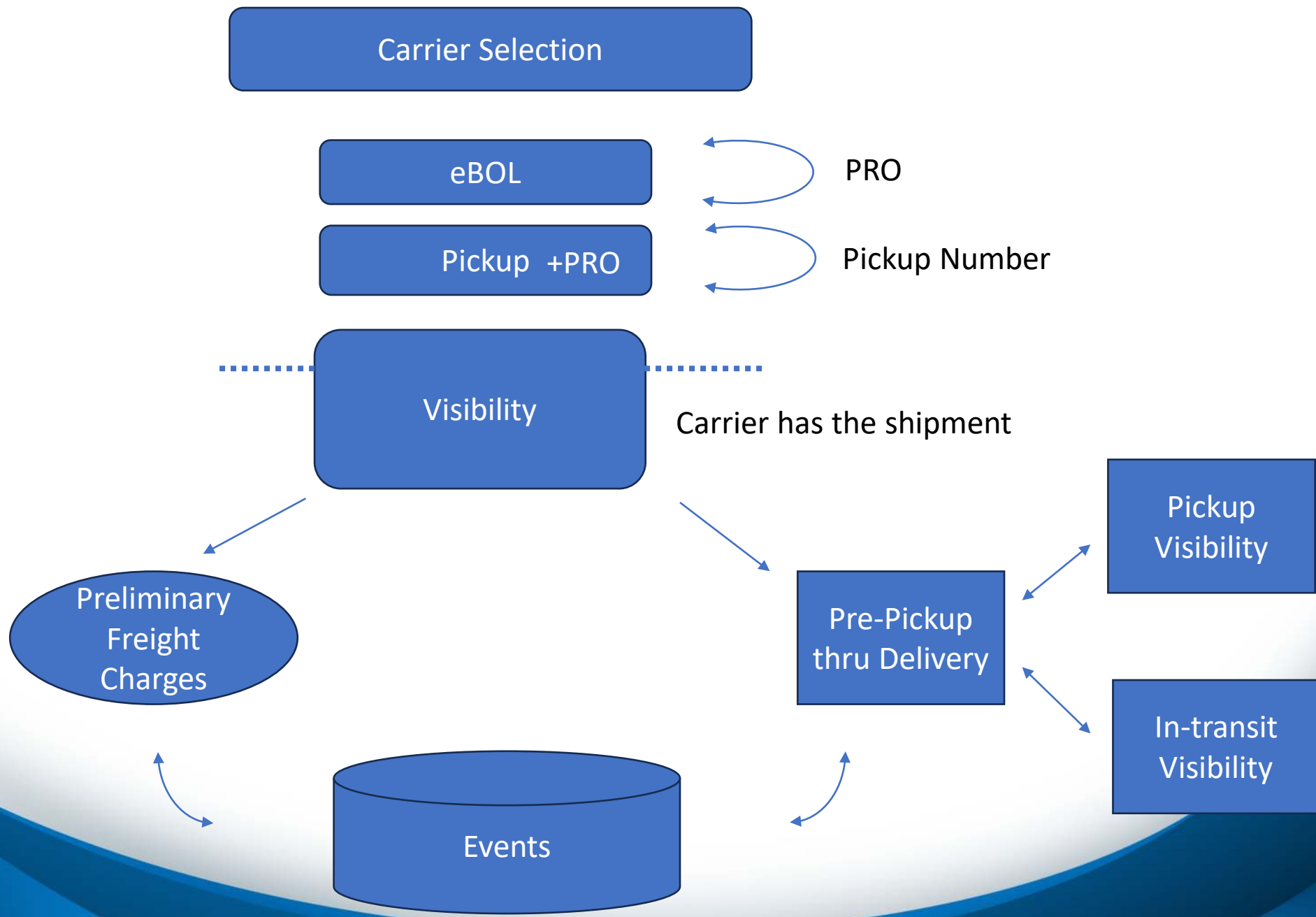
Name	Company
April Rollins	Averitt Express
Ben Wiesen	Carrier Logistics
Bonnie Beckmann	Blue Grace
Craig Foster	Averitt Express
Dianna Giltner	Express Logistics
Douglas Montgomery	Koch Logistics
Dyrc McLeod	Highlander Tek
Hillary Drake	Liminal Network
Isaac Hulvey	Estes Express Lines
Jeff Dahl	Koch Logistics
Jenny Johnson	C H Robinson
Joe Ohr	NMFTA
Kelly Koller	Estes Express Lines
Matt Vanderpol	Arc Best
Phil Smith	SMC3
Sam Ralat	Estes Express Lines
Scooter Sayers	Sayer Logistics
Sean Greenberg	NMFTA
Tim Plonski	Koch Logistics
Tina Appleyard	Arc Best
Woody Lovelace	Southeastern Freight Lines



## Digital LTL Council Workshops

# Digital LTL Council: API Standards Roadmap





Carrier Selection

eBOL

Pickup +PRO

PRO

Pickup Number

Visibility

Carrier has the shipment

Preliminary Freight Charges

Pre-Pickup thru Delivery

Pickup Visibility

In-transit Visibility

Events


# eBOL API – New Methods

- 🚚 **New HTTP methods** - added the ability to Update (PUT) or Delete (DELETE) eBOL data using *PRO Number* as the key identifier.

Carrier API Standards		
POST	/bol/v1/app/	Create an Electronic Bill of Lading
PUT	/bol/v1/app/{pro}	Update an Electronic Bill of Lading
DELETE	/bol/v1/app/{pro}	Delete an Electronic Bill of Lading



# eBOL API – Request Changes

- 
**Limited Access Types –**  
 Adding new, more granular *Limited\_Access\_Types* while ensuring backwards compatibility.

This allows greater flexibility for carriers to use more granular Limited Access types that they may need to support, e.g. when it's associated to a specific charge identified in their tariff.

```

accessorials
  {
    codes > [...]
    hazardousDetails > {...}
    cod > {...}
    sortAndSegregateDetails > {...}
    fullValueCoverageDetails > {...}
    markDetails > {...}
    limitedAccessType
      {
        description: Optional attribute to indicate the limited access type when accessorial code LTDAP or LTDAD is present in the accessorial.codes list.
        origin > [...]
        destination > [...]
      }
  }

```

# eBOL API – Request Changes

- 📄 **Postal Code + 4** - Added as a valid format. This provides added flexibility for carriers to optionally support one or both USA postal code formats: Postal Code + 4 and/or 5-digit Postal Code.
- 📄 **Weight Unit** - added *optional* attribute “weightUnit”, e.g. Pounds or Kilograms, to several objects in the request that were missing them. Imperial UOM defaulted if not specified.
- 📄 **UNNA Number** - Updated the example value for this hazardous goods identifier to be more realistic: “AB123”

# eBOL API – Request Changes

- ④ **Trailer ID** - Added *optional* attribute “trailerId” to *referenceNumbers* in the request. When passed, indicates that the shipment is associated to a specific, spotted trailer.
- ④ **Manifest ID** - Added *optional* attribute “manifestId” to *referenceNumbers* in the request. When passed, indicates that the shipment is associated to a manifest that includes multiple shipments, possibly across multiple spotted trailers.

# eBOL API – Response Changes

- 🚚 **Terms & Conditions** - added the ability for carriers to return their terms & conditions in eBOL responses. This can be done by returning a URL link to their website or return text within the API response body.
- 🚚 **SCAC** - Added new “scac” attribute used to return a 4-letter, Standard Carrier Alpha Code. This adds a carrier identifier in the response that may be valuable to, and/or required by, some API-consuming systems to associate a carrier to the data received.

# eBOL API – Response Changes

- 🚚 **PRO Check Digit** – Updated descriptions for “images.bol” and “images.shippingLabels” to *require* carriers to include the check digit in any PRO Number or bar code image returned in the response *when applicable*. This adds clarity around expectations of carriers when returning bar codes in BOL or Shipping Label images.
- 🚚 **Result Status Codes** - Added new “resultStatusCodes” attribute in the response used to return a standardized, numerical code that describes any logical outcome. This adds consistent, standardized API transaction result codes that apply to eBOL and future Digital LTL Council API specifications that get created.



# NMFTA Website – Updates

- 📖 **FAQS** - a set of frequently asked questions that have been received from members to date



- 📖 **Swagger UI (Planned)** - to view the YAML
- 📖 **Documentation updates (Planned)** – to improve understanding and easier adoption of the specification

# Pickup Request/Visibility Workshop

## Summary

- This API will provide near real-time Status about a Pickup Request
- A key benefit is to eliminate/reduce the number of phone calls amongst all parties

## Key Changes

- A Pickup Number means the Pickup has been Accepted and will be actioned as tendered
- A STOP may have 1 or more Pickups
- Pickup Requests should include the PRO/ePRO. This provides maximum Pickup Visibility
- Each Pickup Request will have the Stops Away and ETA updated as the Driver departs each Stop
- Exceptions and Depart Codes will be industry standard
- The actual GPS coordinates, or “breadcrumbs”, of the Driver are \_not required
- All reference data included in the Pickup Request shall be returned in the Pickup Visibility response
- Upon Depart, the Carrier is expected to provide PRO-level information .and/or. if they will be returning

# Definitions

At the very highest level this workflow starts with a Pickup Number and has 4 key milestones



**Accepted:** means all the pickup details have passed the Carrier's validation and the pickup will be executed as tendered. This is before and not related to the Dispatcher or Driver accepting the pickup. If the Customer has a Pickup Number, the pickup is Accepted.

**En Route:** this is after the Driver accepts the pickup and has now departed the Terminal.

- Includes and decrements Stops Away

- Includes the ETA to the Stop



**Arrived:** This is a Driver-initiated action that says the carrier was there and the pickup was attempted

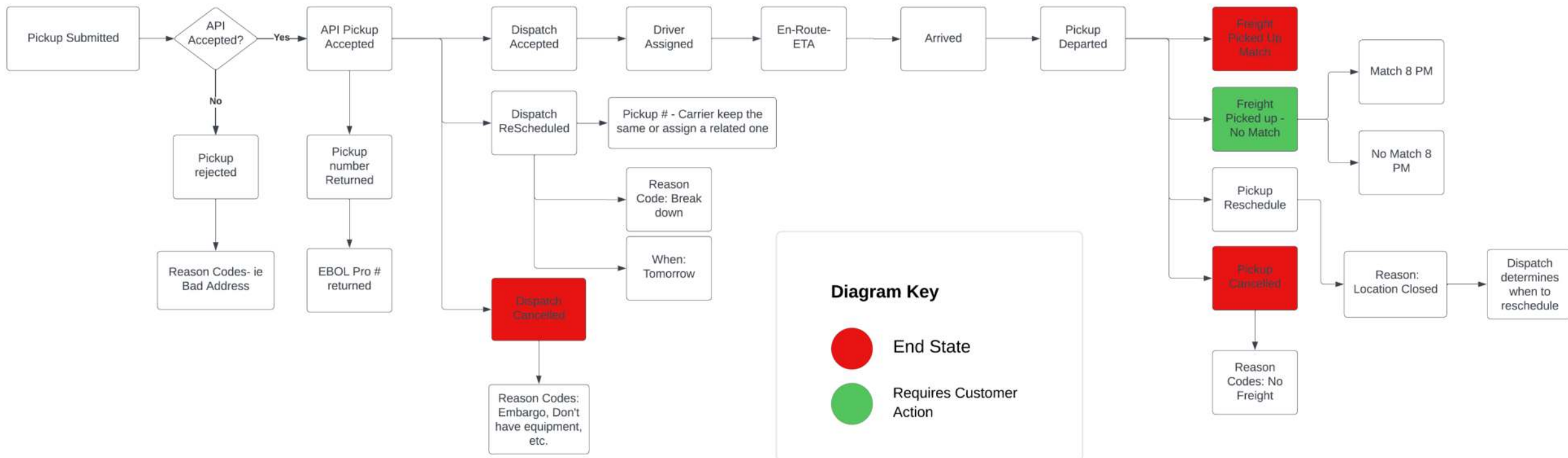
**Departed:** This is a Driver-initiated action that says the STOP was serviced.

**Exceptions:** an exception can occur at any point in the process.




# Process Workflow

The intent is to track a Pickup using the Pickup Number or the PRO number

Additionally, the Depart codes let the Customer know if the Carrier will or will not be returning i.e. phone call needed



# In Transit Workshop Overview

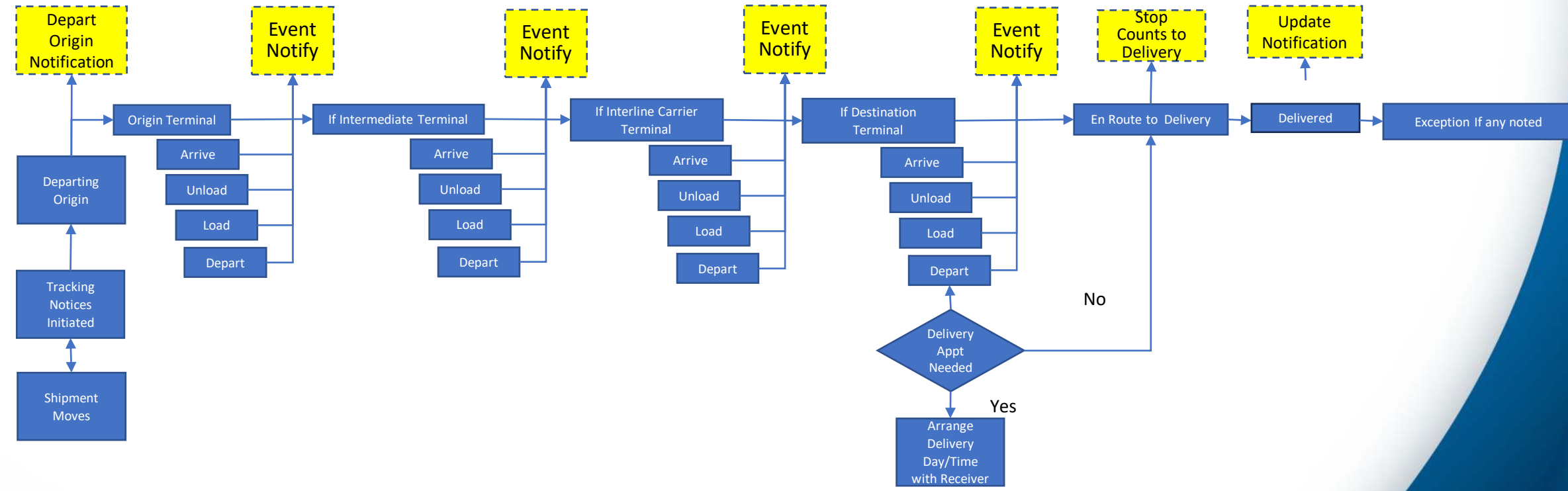
-  The intent is to significantly reduce the number of customer service interactions between carriers and shipment stakeholders.
-  This API will include status updates along the path of the shipment. It starts when the carrier acknowledges they have a shipment and ends when the carrier delivers the shipment to the receiver and the receiver acknowledges receipt.
-  The API is designed to push relevant data to stakeholders through the In-Transit portion of the shipment. It also offers a pull query to retrieve the latest current status.



# Key Features

- 🚚 Important advances include new milestone status of Interline as well as the ability to share Interline carrier data and interline Pro#.
- 🚚 Other new additions include additional terminal status visibility to Arrived, Unloaded, Loaded, and Departed from carrier terminals.
- 🚚 Notification of Stops from Delivery starting with 3 stops away to better prepare the consignees to receive the freight
- 🚚 Imaged POD availability
- 🚚 Exception notifications for Late, Damage, Loss, Reweigh, Accessorial additions, Reconsignment requests, Appointment and Deliveries.
- 🚚 Normalizing Delivery exception codes into a tier for shippers and 3PLs and a second tier for carrier specific internal codes

# Major Milestones



# Potential New Data Needs

- ④ Terminal contact and address data are new supported data elements
- ④ Stop counts to delivery (3 or lower)
- ④ Interline partner contact information and pro#
- ④ Noted exceptions
- ④ Delivery exception reference codes

# Preliminary Freight Charges

- 📄 Pain Point: Invoice does not match the payer's expectations
- 📄 Goal: Eliminate friction around billing by enabling the responsible party to be informed of charges from the time the carrier takes possession of freight until the initial invoice is generated
- 📄 Benefits:
  - 🚛 The sooner a discrepancy is known the sooner it can be acted on for resolution
  - 🚛 No surprises when the invoice is received; reduce phone calls and emails; payments on time
  - 🚛 Ready access to more accurate data
  - 🚛 Increase in Customer Satisfaction

# Monitoring and Reporting on Changes

- 🚚 Confirmation of charges at first rating after pick up
- 🚚 Daily push notification is triggered when pre-determined events occur; some will have +/- charges associated and some will not
- 🚚 Changes around weight, class, DIMs, accessorials, etc. will be detailed in the API by date
- 🚚 Events will be coded as an industry standard and new rated freight charges will be included
- 🚚 Last received rated charges should match the invoice



# Key Data Elements

- 🚛 Re-weigh
- 🚛 Re-class
- 🚛 Re-consignment
- 🚛 Detention at Delivery
- 🚛 Detention at Pickup
- 🚛 Accessorial Services
- 🚛 Corrected BOL/Change in Terms
- 🚛 Residential Pickup
- 🚛 Residential Delivery
- 🚛 Cubic Capacity Reached
- 🚛 Pickup Attempt
- 🚛 Re-delivery

# Next Steps

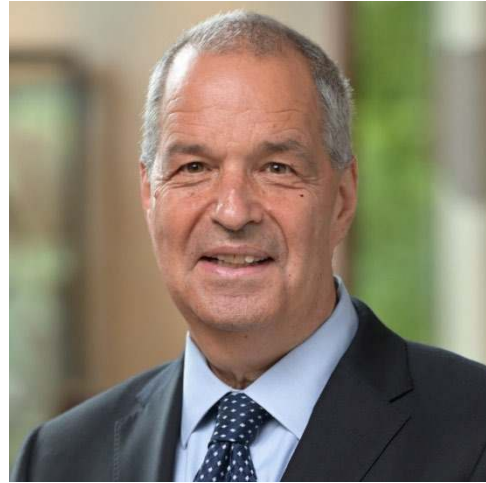
- 🚚 Process flows are being developed
- 🚚 Data fields and descriptions identified
- 🚚 Tech Committee review
- 🚚 JSON development

# Panel Discussion

Moderator



Brian Thompson  
Chief Commercial Officer  
SMC<sup>3</sup>



Geoff Muessig  
Executive VP and CMO  
Pitt Ohio



Jenny Johnson  
Senior Manager Regional  
Operations  
CH Robinson



Angelo Ventrone  
Vice President of Logistics  
Uline



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