

**Commercial Customs Operations  
Advisory Committee (COAC)  
Secure Trade Lanes Subcommittee  
4Q2020 Inbond Technical White Paper extract V2**

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**COAC**

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COMMERCIAL CUSTOMS OPERATIONS  
ADVISORY COMMITTEE

## COAC In-bond Working Group – Technical White Paper

(These are the technical issues as stated in the larger COAC In-bond White Paper)

In order to effect the goal set out in COAC recommendation 10323,<sup>1</sup> the In-bond WG is refining the Statement of Work (SOW) and creating a separate White Paper, derived from the IB WG white paper. This is to identify the Technical issues identified for transmission to the Trade Support Network's In-bond Committee, charging them with the responsibility of a comprehensive information technology plan across multiple ACE modules that will facilitate full and seamless in-bond automation from a technical perspective.

### **From: PILLAR 1: Rationalization of In-Bond Regulations and Policy, Including Proper Apportionment of In-bond Liability among Supply Chain Parties**

#### Proposed Technical Solutions:

- Create a full buildout of ACE multimodal, end-to-end automation, to allow seamless real-time electronic in-bond transfers within and across all modal manifest systems and broker systems. This would include functionality to complete in-bond “handshakes” between parties when cargo is physically transferred from one party to another (i.e., a message from the first party that the in-bond shipment has been transferred and from the second party that the in-bond shipment has been physically received.) Allow for transfer of liabilities messaging from CBP within respective facilities within required reporting time limitations.

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<sup>1</sup> COAC Recommendation 10323 of 2/27/2019 reads: COAC recommends that CBP work closely with industry stakeholders to develop a comprehensive Information Technology (IT) plan across ACE modules to facilitate In-Bond automation. The principles informing the development of this plan should include the following: i. Carriers in all modes should be provided with the necessary functionality to accomplish all carrier related In-Bond automation requirements in the Automated Manifest System (AMS) and not be required to access the Automated Broker Interface (ABI) for such functions. ii. The timing to develop/implement new ACE functionality to allow efficient implementation of the final rule automation requirements should determine the effective date of a given automation

requirement. iii. Automated solutions should be developed on a systemic basis to ensure stakeholders do not have to engage in manual workarounds to implement partial functionality. iv. CBP should leverage existing ACE automation projects, such as truck refactoring and automated export manifest, to the maximum extent to develop full In-Bond automation capabilities for both import and export across all modes. v. A timeline of no later than December 31, 2019 should be established by CBP to require all facilities that handle In-Bond freight to automate their In-Bond processes.

- Develop necessary automation for all facilities that accept, handle and/or release bonded cargo. In doing so, strive for cost-efficient and minimally burdensome implementation.<sup>2</sup>
- Develop the ability to manage in-bonds against the house bill level in all modes and further the ability to query ACE transaction notifications at the house bill level.
- Add piece count to the portal truck in-bond record.
- Establish automated notifications and permits to manipulate.
- Provide the trade with more robust and nuanced ACE controls over in-bond use.
- Develop push messaging to allow real-time notice to bonded parties when a bond obligation attaches.

**From: PILLAR 2: ACE Modernization to Provide All Trade and CBP Stakeholders with Needed Visibility to In-bond Transactions and Statuses**

Proposed Technical Solutions [validation and effective solution to come from TSN]

- Enable ACE to provide system-interoperable, real-time visibility for in-bonds opened on “domestic in-bond exports”, which will often be created not in a manifest system but in QP/WP, and provide notification to the exporting carrier of that status in a manner that allows the exporting carrier to clearly identify the shipment in question. [how will this be communicated to parties that do not have access to QP/WP?]
- Update automation in ACE to provide push notifications to notify carriers when an in-bond has been created under their liability and when changes/updates to the in-bond occur.
- Enhance ACE data extract/load processes to allow ACE reports to reflect near to real-time in-bond status.
- Implement system edits to require that sufficient information be provided at the time of in-bond creation to ensure that carriers can accurately identify every shipment for which they have an in-bond obligation. This identification need applies to both ACE reporting and real-time push notifications.<sup>3</sup> This item pairs with the policy solution identified above.<sup>4</sup>
- Create account types in ACE that would allow currently non-automated facilities to connect to CBP to receive real time notifications of status and/or report arrival/disposition of cargo in those facilities.
- Provide the ability to amend in-bond transactions rather than the current process of having to delete and re-add full details of an in-bond record. Efficiencies would be gained by both the trade and CBP with this functionality enhancement.<sup>5</sup>
- Develop ACE functionality to send push notifications to the party whose bond has been obligated and the party currently in possession when a shipment is nearing the 30-day maximum time, in order to facilitate compliance with the new maximum 30-day total in-bond transit time.<sup>6</sup> This is similar to the ACE general order clock functionality that generates 1R/1S-type notifications in advance of the G.O. deadlines for notification and transfer.

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<sup>2</sup> E.g., consider the provision of mobile applications, ACE portal functionality for basic visibility and notifications, etc.

<sup>3</sup> For example, if a conventional air carrier’s bond is obligated, entry of the carrier’s AWB number should be required.

<sup>4</sup> This is a follow-on item from closed COAC Recommendation 10314 of 2/27/2019. See Appendix 1.

<sup>5</sup> This topic has been addressed in COAC Recommendation 10321 of 2/27/2019. See Appendix 1.

<sup>6</sup> This topic has been addressed in COAC Recommendation 10315 of 2/27/2019. See Appendix 1.

- Development of the minimum-necessary automation functionality for all facilities that accept, handle and/or release bonded cargo. In doing so, strive for cost-efficient and minimally burdensome implementation.<sup>7</sup>
- Automate requests for a permit to manipulate cargo and the creation of new notification messages of the permit's approval, with approvals against the lowest level bill.
- Provide an automated solution to accommodate transmission of the required notations for zone-restricted cargo to facilitate CBP enforcement of the FTZ Board or TTB required export or destruction of ZR merchandise. Current process requires making notations on paper.

**From: PILLAR 3: ACE Modernization to Provide Seamless In-Bond Interoperability among All Manifest and Broker In-Bond Systems**

Proposed Technical Solutions:

- Provide all necessary functionality to allow effective in-bond automation across all modes of transport and between import and export cargo movements within the automated manifest systems, especially leveraging the planned truck refactoring and the automation of ocean export manifest processes in ACE.<sup>8</sup>
- Enhance all automated manifest systems to allow a carrier to accept an in-bond shipment from another mode of transport, to receive in-bond status information from ACE in its own manifest system, and to report in-bond arrival/export to ACE from its own manifest system. This will support the regulatory change discussed above (Pillar 1) to allow a bonded carrier to assume liability for an initial in-bond opened by another carrier and eliminate the need for multiple subsequent in-bond filing.<sup>9</sup> This functionality is needed within each manifest system (e.g., to allow a truck carrier to accept liability from another truck carrier) and between modal systems (e.g., to allow a truck carrier to accept liability from an air carrier).
- Development of the minimum-necessary automation functionality for all facilities that accept, handle and/or release bonded cargo. In doing so, strive for cost-efficient and minimally burdensome implementation.<sup>10</sup>
- Where there are modal ACE differences, create translation tables to facilitate ACE interoperability between different modes of transport.
- Allow for all bill of lading types to be used among all modes of transport for in-bond cargo.
- Standardize edits across all modes (e.g., for arrival and all other mandated notifications).
- Enhance the Electronic Export Manifest to ensure full in-bond closure upon departure of the export conveyance.
- Develop a multimodal in-bond process for flying trucks that allows seamless express and conventional air processing throughout the transaction.<sup>11</sup>
- Allow the use of both airport and 4-digit port codes in air manifest.

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<sup>7</sup> E.g., consider the provision of mobile applications, ACE portal functionality for basic visibility and notifications, etc.

<sup>8</sup> This topic has been addressed in COAC Recommendation 10377 of 8/27/2019. See Appendix 1.

<sup>9</sup> This topic has been addressed in COAC Recommendation 10378 of 8/27/2019. See Appendix 1.

<sup>10</sup> E.g., consider the provision of mobile apps, ACE portal functionality for basic visibility and notifications, etc.

<sup>11</sup> A short term fix could be provided by CBP providing capability for truck carriers to pull AWBs from air carriers into their truck manifest declaration without having to re-key the data

**From: PILLAR 4: Alignment of In-bond Regulations and IT Functionality Baselines among All Modes of Transport<sup>12</sup>**

**Proposed Technical Solutions: [through TSN]**

- Provide the capability to utilize port codes in addition to airport codes in air manifest, and to link air in-bonds to ports of entry with a port code.
- ACE should allow carriers of all modes of transport to arrive their manifests upon conveyance arrival in the U.S..

**From: PILLAR 5: Maximum Nationwide Harmonization of Port-level In-Bond Policies and Processes**

**Proposed Technical Solutions:** None identified, beyond expanded technical training to ports, perhaps utilizing enhanced computer-based training based on best practices learned during the COVID-19 pandemic.

**From: Miscellaneous High-Pain Items (Some of which are Potentially Low-hanging Fruit in Terms of Short-term Policy or Technical Fixes)**

Items requiring Policy and Technical Solutions:

- Merchandise Processing Fee multiplies when in-bond ocean freight enters the U.S. at a border port by rail: ACE does not recognize a single multi-container shipment from a vessel that is split onto multiple trains, which generates much higher costs to the U.S. Importer. This is a CBP policy and system issue. When importers/brokers clear a single in-bond shipment from a vessel calling on a Canadian port, made up of multiple containers re-billed and crossing the border on different trains, they should be able to file a single entry. Today, these shipments would require a single bill with split arrival at the container level to allow for single consolidated entry at destination.

*Technical and policy potential solution: Rail carriers should have split shipment functionality for multi container ocean shipments that arrive in Canada or Mexico and that are re-billed for arrival by rail in the U.S.*

Items with Potential Technical Solutions:

1. Transit from in-bond origin to destination in tranches: For shipments that move from the in-bond origin to in-bond destination in tranches, there is a mismatch between Air Manifest in-bond arrival functionality (full arrival only) and the 2-business day arrival requirement as interpreted by CBP (arrival report mandatory w/in 2 business days of arrival of first piece). Because ACE does not provide piece-level arrival capability, a carrier may be unable to be simultaneously in compliance with both requirements in cases where a shipment moves in

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<sup>12</sup> Excluding pipeline

tranches.<sup>13</sup> In modes other than air, there is a similar problem with ACE's lack of functionality to arrive in-bond shipments by container or at the house bill level.

- i. *Potential Technical Solution: Enable ACE to allow the partial arrival of goods, including by piece count or container, or at the house bill level.*
  - ii. *Alternative Potential Regulatory/Policy Solution: Amend CBP policy and any associated regulations, if needed, to alter the 2-business day arrival requirement for shipments moving in tranches from "within 2 business days of arrival of the first piece" to "within 2 business days of the arrival of the last piece".*
2. T&Es that export through the first port of arrival cannot be arrived or closed due to system edits: There is a need to create T&Es that exit through the first port of arrival to address shipment returns and the rerouting of misrouted shipments. For example, a Caribbean-origin AWB might arrive at San Juan, PR, and then move in-bond to a carrier hub. When the shipment doesn't clear and must be returned, it must have a T&E in-bond from the hub back to San Juan in order to return to the Caribbean origin). Current ACE Air edits do not allow a subsequent inbond to be returned to its original port. This works in Ocean and Rail.  
*Potential Technical Solution: Remove ACE air system edits that prevent a T&E in-bond from exporting from the first port of arrival.*
3. FIRMS code processing is decentralized, manual, not real-time, and not incorporated into ACE: FIRMS code creation is a manual process, and administration is handled at the port level - with variation from port to port - leading to unnecessary complexity and confusion. Further, there is no automated FIRMS code reference within ACE. Instead, FIRMS codes are available only as a text file that is updated every 2 weeks. This hinders the use of active FIRMS codes, with ACE rejects being the only way filers are made aware of an issue with a particular code. This generates inefficiency and manual work for remediation.  
*Proposed Technical Solution: Centralize FIRMS code creation and administration in ACE, perhaps in the ACE Portal or with a stand-alone FIRMS code module. Automate processes for: requesting and creating new FIRMS codes; searching for or querying FIRMS codes; and requesting updates to FIRMS codes and accomplishing other related functions. Consider the addition of drop down FIRMS code functionality to ACE Truck and other manifest systems.*
4. The 30-day in-bond transit clock does not "stop" when CBP places a shipment on hold: This appears to be an oversight in ACE programming. The trade is powerless to move a shipment when it is under a CBP or PGA regulatory hold. The in-bond clock (30 day), the G.O. clock (15 day) and the entry summary clock (10 day) should all stop if the goods are placed under a CBP hold and resume when the hold is removed.

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<sup>13</sup> Specifically, in the case where some pieces have arrived at destination and been there for over two business days, but other pieces are still in transit, the carrier is in a no-win situation. It can arrive all pieces to comply with the 2-business day arrival rule, but this would terminate the in-bond authorization, leaving the shipment pieces still in transit in limbo. Or it can wait until all pieces arrive before sending the arrival notification, thus violating the 2-business day arrival rule. Note, it is understood that all pieces would need to arrive at the in-bond destination within the 30-day regulatory window.

*Proposed Technical Solution: The in-bond clock should stop from the time when a shipment is placed on hold until the hold has been released. This is just a programming issue being addressed by CBP*

5. Self-filer ability to file MAWB-level in-bond/local transfer: When an express carrier shipment moves on a conventional air carrier, confusion often arises when MAWB-level in-bonds and local transfers must be filed or adjusted. In cases where the conventional carrier has filed the MAWB with a nomination of the express carrier as agent, it would be efficient to allow the express self-filer to manipulate the MAWB TRN line.

*Proposed Technical Solution: In air manifest, provide the ability for an express carrier house bill filer that has been nominated as an agent in the MAWB air manifest record to file in-bond/local transfers for the MAWB. This should be for AIR Only*

6. Congestion delays: Congestion at origin rail ramps impacts the timely movement of in-bond shipments to destination.

*Proposed Technical Solution: Have ability to stop clock based on delays at ramp, and have notice generated to CBP through ACE to allow clock extension until cargo physically moves. Customs to send an acknowledgement along with total new updated time remaining in the 30 day clock, which will now include the update from carriers.*

7. The current regulations at 146.66(a) indicate that a transfer within port between zones with different operators may be done under an entry for immediate transportation via the in-bond application or other appropriate form with a CBP 214 filed at the destination zone. The existing QP/WP application however does not support the use of an IT since both the origination and destination ports are the same. Additionally, as the original import bill of lading closed once the admission was concurred, there will be no existing open manifest record in the CBP's system to support the transaction. A manual bill (i.e. trucker' BOL) will be used for the transaction, which will not be reflected in the CBP manifest system.

Although this cargo is a bonded move, this manual break creates a blind spot to visibility  
*Proposed Technical Solution: Create new single ACR/H01/ZCR that would allow carriers to submit at CTR or BL level indicating total "N" time of delay. Modify QP to accept a new type of transaction that would allow for the within port move using the same port code for origin and destination, if regulations continue to require IT. QP allow a manifest record to be created as part of the movement from the zone. Alternatively, create a stand-alone PTT capability that will create a manifest record, PID (unique PTT identifier) and provide visibility to the approval and receipt of the movement.*

8. Bonded freight (FTZ and bonded warehouse) no longer traveling on the original bill of lading: Currently there is a need to move by bonded carrier, shipments between or amongst FTZs and bonded warehouses located within the same CBP port. These movements are not tied to an international transportation bill and therefore cannot be handled under normal automated Permit-to-Transfer scenarios tied to a manifest or international transportation bill. The work around solution often used by local ports is to allow an in-bond to represent this intra-port movement, even though it is not allowed under the in-bond regulations.

*Proposed Technical Solution: Automate the movement of bonded freight (FTZ and bonded warehouse) that is no longer traveling on the original bill of lading and is moving within the same port on a PTT that is created outside of manifest or e214 (currently using QP/WP).*