Preamble

This document reports on the topics on which consensus has been reached by the Joint ICAO WCO Working Group on Advance Cargo Information (JWGACI) on Pre Loading Advance Cargo Information systems (PLACI) and identifies several challenges that require additional practical experience and analysis in order to achieve agreement by the JWGACI. It does not yet provide a complete concept of operations for the implementation of PLACI, which is the deliverable required under Phase II of the group’s Terms of Reference. This more detailed guidance will be developed as the necessary information becomes available from on-going pilot projects and other sources.

1. Purpose

1.1 This document has been developed, as prescribed in Phase II of the Terms of Reference for the ICAO-WCO Joint Working Group on Advance Cargo Information (JWGACI), to inform World Customs Organization (WCO) Members, International Civil Aviation Organization (ICAO) Contracting States, other government entities (hereinafter collectively referred to as “States”), and other parties about the principles and processes of the use of Pre-Loading Advance Cargo Information (PLACI).

1.2 This document also serves as a guide for States that may be considering the option to implement a PLACI regime as an additional layer of their national air cargo security program. Those states are also encouraged to carefully consider the challenges identified. The document provides the basis for the design and operation of a PLACI regime, and aims to encourage and guide a harmonized approach for the implementation of PLACI regimes so that States may align their efforts to the fullest extent possible.

1.3 This guide draws upon the experience of the three PLACI pilots in testing the use of PLACI (US Air Cargo Advance Screening – ACAS), Canada Pre-load Air Cargo Targeting (PACT), and EU Pre-load consignment information for secure entry (PRECISE), the “Principles and Model for PLACI” developed under Phase I of the JWGACI’s work, as well as the “Practical Application of PLACI” exercise conducted during the third meeting of the JWGACI.

2. Concept of Pre-Loading Air Cargo Information

2.1. PLACI is the term used to describe a specific (‘7+1’) dataset drawn from consignment data and provided to regulators by freight forwarders, air carriers, postal operators, integrators, regulated agents, or other entities as soon as possible in a pre-load timeframe (i.e. prior to loading of cargo on an aircraft, as specified by the regulations and authorities of the requesting state). Regulators (analysts or targeters) can use this data to perform an initial assessment of the potential risk represented by the consignment, which may indicate a need for additional actions, such as high risk cargo screening.

3. Background of PLACI

3.1 The concept of PLACI had been considered by regulators in the past, as an aviation security evolution to the current ACI regime which allows Customs to target cargo shipments in respect of a range of regulatory issues. The development of PLACI
initiatives was given added impetus by the terrorist incident in October 2010 whereby IEDs were placed on an aircraft concealed in computer printers. This incident led to the establishment of the United States’ ACAS pilot, followed by the European Union’s PRECISE and Canada’s PACT pilots.1

3.2 These pilot projects have been testing the feasibility of using PLACI for aviation security risk assessment and mitigation purposes as an additional layer to current cargo security regimes, for States which wish to implement it. The pilots, each of which have had varying degrees of industry participation, have tested different air cargo supply chain business models including those for the express, general cargo and mail segments of the business, and involved the regulated agent and freight forwarder community.

3.3 Results of the pilot projects and work completed in the JWGACI to date have demonstrated that a PLACI regime can be practically applied as an additional layer to existing air cargo security measures with minimal disruption to the supply chain.

4. Principles and Considerations

Principles

4.1 Discussions among the international community have led to the establishment of a set of principles and model for the use of PLACI by States. As States begin to explore the possibility of implementing PLACI regimes, the basic principles are intended to help ensure an effective and efficient global system, which meets the needs and capabilities of both regulators and industry.

4.2 The principles include:
- State authorities and industry stakeholders who have responsibility for aviation and air cargo security should be consulted on and closely involved in the use of PLACI for aviation security purposes;

- For States which wish to implement PLACI as an additional layer of a multi-layered approach to aviation security, a globally harmonized approach with avoidance of duplication should be adopted in view of the cross-border, interconnected, and multi-modal nature of air cargo flows;

- PLACI systems should not unnecessarily impede or delay the flow of cargo movements through the supply chain. Where a regulator has notified that it has significant unresolved concerns related to a possible threat to aviation security arising from its risk assessment process, cargo should not be loaded onto an aircraft until appropriate measures have been taken to mitigate that risk. Where such concerns are raised about cargo already in transit by air these should be resolved at the earliest available opportunity;

- States should abide by the principles of international cooperation in aviation security, as adopted by the ICAO Assembly and included in Annex 17 to the Chicago Convention, and the WCO’s SAFE Framework of Standards in the use of PLACI for aviation security purposes.

Considerations

1 Canada PACT launched in October 2012 and focused on passenger flights. EU conducted first the express courier pilot in 2012, followed by a postal pilot from 2012-2014 and the PRECISE study with the traditional air cargo business model in 2013. US ACAS launched in December 2010 and initially focused on the express industry, and subsequently included passenger carriers, all cargo carriers and freight forwarders.
4.3 Should a State choose to implement a PLACI regime for air cargo security risk assessment, action taken to that end should not conflict with existing legal frameworks to which the States in question are party, including bilateral and multilateral agreements. In addition, it is up to individual States to carry out detailed implementation work in accordance with their respective domestic legal frameworks, mandates, and existing structures and processes, taking into consideration the practices and procedures detailed in this document to the greatest extent possible.

4.4 Internationally, the use of PLACI will have implications for the legal and regulatory frameworks of the WCO and ICAO as well as implementing States. The data elements for PLACI regimes have already been included in the 2015 version of the WCO’s SAFE Framework of Standards (further detail on these data elements below). States who wish to implement the PLACI regime should follow guidance and/or standards of ICAO and the WCO as they become established.

4.5 Each State should carefully consider whether there is sufficient justification for the implementation of a PLACI regime, which requires significant investments in financial, information technology and human resources. The use of automated risk assessment system is vital to avoid impeding the flow of legitimate trade, States must be in a position to handle vast amounts of information so as to achieve timely initial assessments on PLACI data being submitted.

4.6 It is to be noted that through its pre-loading focus, PLACI regimes also have a potential impact on the implementation of air cargo security processes in States (and entities established in those States) throughout the supply chain that have not considered it necessary to adopt a PLACI regime for their State.

4.7 In addition to the impact of a single PLACI regime, the combination of multiple PLACI regimes implemented in parallel has potential impact on the functioning of the international air cargo supply chain. This is because there may be conflicting requests arising from different PLACI regimes. Further work is required in this area.

5. PLACI – Elements of the Process

Data

5.1 The recommendation from the JWGACI is that States adopting PLACI should require the submission of the following data elements, known as the ‘7+1’, to initiate a risk assessment for aviation security purposes:

i) Shipper/consignor name
ii) Shipper/consignor address
iii) Consignee name
iv) Consignee address
v) Number of packages
vi) Gross weight
vii) Brief Cargo description
viii) Air waybill identifier² (HAWB and/or MAWB)

² The identification of the data filer must be provided together with the HAWB and/or MAWB number according to the air cargo business model. In particular, postal shipments will not be accompanied by a HAWB and MAWB, but do have a unique identifier which can be used in the same way as a HAWB or MAWB to identify a shipment
5.2 The PLACI pilot projects have shown these data elements to be available early enough in the supply chain, as well as sufficient for conducting an initial risk assessment. They therefore represent the best practical option for aviation security purposes.

5.3 Entities responsible for submitting PLACI to the relevant regulator(s) can include express delivery companies, air carriers, postal operators, and freight forwarders, or their authorized representatives (e.g., ground handling agents). Other entities in the supply chain should be able to provide PLACI data to the state of arrival or intermediate state and possibly perform screening or other mitigation actions as needed. Submissions should be sent as soon as the information becomes available but no later than prior to loading onto the aircraft.

5.4 If any of the 7+1 data elements are missing, the filing should be rejected promptly so that the filing party can address any omissions. In situations where the data is absent or of insufficient quality or integrity, it becomes much more difficult to assess, identify and mitigate risks.

5.5 Data submissions should be assessed in a timely manner according to risk rules and indicators, which should be developed according to information on intelligence, threat, and risk by each State that chooses to implement a PLACI regime. PLACI should also be subject to data protection standards, e.g. through the use of secure systems.

Other Data

5.6 In addition to the 7+1 data elements required for PLACI submissions, other consignment data can be helpful in risk assessment and avoid the necessity of further mitigation measures for a shipment. Thus, industry entities can optionally provide, and regulators can accept, additional security information (e.g. security status, screening codes) and other information (e.g. routing, special handling codes) by the filing party. This information can be provided optionally, when available, either at the same time as the initial data submission or along with a response to requests for further information by regulators.

Messaging and Communication Protocols

5.7 To optimize functionality, PLACI messaging should be both electronic (i.e. filed via an electronic system as opposed to paper filing) as well as automated (e.g. submissions sorted automatically according to risk indicators for further manual review, when needed, by a targeter). Due to the large volumes of consignment data and time constraints, the use of an automated and electronic system is critical to handle submissions, risk assessment, and return messaging in a timely and efficient manner. This submission should be done through the same data system as used for other cargo manifest data.

5.8 For this purpose, the data submitted by industry for PLACI regimes could be drawn from existing consignment data (e.g. electronic air waybill (e-AWB) or electronic consignment note, e-consignment security declaration (e-CSD) information, data hosted in proprietary IT system where available). This could create efficiencies for both state authorities and industry stakeholders in light of current international efforts to move away from paper.

5.9 Communication protocols must be established between regulators and industry to allow timely and effective messaging for both the initial data submission as well as possible subsequent referrals. There should also be communication protocols established for States to exchange information on shipments posing a risk to air
aviation security, with the possibility of leveraging existing aviation security communication channels for transmitting urgent messages.

5.10 States choosing to implement PLACI should strive for common messaging protocols, with the caveat that, as with other elements of PLACI regimes, communication protocols may need to be adjusted depending on the type of air cargo business model. Furthermore, points of contact must be determined and kept up to date, and processes should be clearly developed and communicated with all parties so that messaging and referrals can occur quickly and efficiently.

Risk Assessment and Mitigation

5.11 States utilizing PLACI should establish their respective risk assessment processes to ensure that aviation security risk assessment is the key deliverable of PLACI, and should be carried out in accordance with current internal processes and mandates of relevant authorities. This could include a joint risk assessment process between aviation security authorities, customs, and other relevant authorities as the State deems fit.

5.12 Cooperative approaches for risk assessment can take different forms, such as joint targeting or co-location of relevant authorities. Cooperation between customs and aviation security authorities should focus on the appropriate allocation of data management, risk assessment, and mitigation responsibilities and communicating with relevant stakeholders where needed during risk assessment.

5.13 Once the 7+1 data has been received, it should be assessed according to aviation security risk rules and indicators, which should be developed jointly by the relevant regulators (i.e. aviation security authorities, customs) with elements pertaining to the specific threats to the air cargo transport mode. In addition, intelligence, historical data, previous incidents, and the current threat to aviation are considered part of the risk profile.

5.14 Data should be submitted as early as possible and any request for action (1, 2 or 3 below) communicated arising from the risk assessment should be returned to the data filer as early as possible to minimize the potential disruption to legitimate trade. Based on the risk assessment, targeters can escalate a shipment that presents elevated risk. The risk assessment process may result in a determination that:

1. The risk assessment cannot be completed because a clarification of required data (7+1) - or in some cases, additional data - is needed. Under the current pilots, such situations are handled via issuance of a Request for Information (RFI) by the regulatory authority to the filer.
2. The risk assessment indicates that a shipment may pose an aviation security risk and that screening or additional screening is required, accomplished under the current pilots via a Request for Screening (RFS).
3. The risk assessment indicates a shipment may pose an imminent threat to aviation security. In the current pilots, such a case has not occurred, but the message to be issued in such a case is known as a Do Not Load (DNL).

5.15 Each of the above listed risk assessment determinations should have an associated response protocol with appropriate mitigation measures to be carried out by the relevant parties. Such response protocols should be designed to balance security and facilitation considerations.
5.16 Beyond the general principles outlined above, the response protocols for RFI and RFS require additional practical experience and testing from the ongoing PLACI pilots to inform further policy development. Continued live testing of RFI and RFS response and further elaboration of mitigation protocols will be necessary to allow for policy and operational conclusions to be drawn.

6. CONCLUSION

6.1 The JWGACI members have accomplished a great deal since the initiation of this joint working group, by way of discussion, collaboration and practical application. While some issues remain to be resolved, there has been progress on items such as the development of the principles of PLACI, the data elements for initiating a risk assessment, risk mitigation and examination of questions relating to referral protocols, and the acknowledgment that a PLACI program can succeed as an additional layer of air cargo security.

6.2 The results captured in this paper, as well as the associated meeting reports and other submitted materials, provide the basis for the JWGACI's accomplishment of its main objectives as outlined in the Phase 1 and Phase 2 Terms of Reference. It should be recognized that although the PLACI concept is well underway and much progress has been made, there is still more to develop, test and validate. Pilot efforts are continuing and other countries are expected to begin; therefore, it is critical that as PLACI evolves that collaboration continue in order that a sound global framework be established.

6.3 The close collaboration by Customs, Aviation Security and industry representatives to develop, assess and validate the components of PLACI, through the operational pilots as well as the JWGACI is reflected in this paper and must continue through to the next phase of work.

6.4 While the preliminary ‘Elements’ (S. 5) and ‘Principles’ (S.4) of standing up a PLACI regime have been agreed upon thus far, specific guidance material and/or international standards for implementation of a PLACI program are required. Identified challenges (noted in S.7) relate to response protocols, automated systems, routing/transfer and operational/compliance issues still require further discussion, testing, monitoring of progress and keeping track of identified challenges.

6.5 In conclusion, the JWGACI seeks the endorsement of WCO TEGACS and ICAO WGACS on this interim report, the ongoing work related to identified challenges and its recommendations for next steps.

6.6. By 15th March 2016, Pilot States will provide a prioritized list from the identified challenges which will be subject to testing or further discussion. Arrangements for testing with a provisional time frame will be agreed with industry. The next JWGACI will be reconvened when sufficient information from the testing is available, with a view to concluding Phase 2.

7. IDENTIFIED CHALLENGES

7.1 Several other aspects of PLACI regimes also require further testing through the pilots (individually and jointly), to provide further empirical data and analysis before policy decisions should be taken, and to identify additional topics that may arise through the ongoing pilots. Currently, the JWGACI has identified the following outstanding issues for PLACI:
Automated System, Data filing and Messaging

The implementation of a PLACI system requires the adaptation of existing and/or creation of new data transmission and messaging protocols between numerous participants in the international supply chain (for example: industry-industry, industry-government-industry, government-government). As large amounts of data need to be processed in a timely manner to ensure that the speed of air cargo is supported, automation, streamlined processes and effective programming are crucial. Further work is required on:

- Single window/portal - Implementation of a single PLACI filing window that facilitates an efficient and cost effective electronic consignment data and subsequent communications between the regulators and filing parties to ensure quick and efficient exchanges of messages and referrals. This includes single windows within individual states, among states in a single PLACI regime and among multiple PLACI regimes.
- Differing requirements by air cargo business model for messaging that confirms initial risk analysis has been completed.
- Dual filing messaging/protocols (forwarder and carrier, especially where forwarder is not regulated under PLACI AVSEC regime)
- Messaging to indicate that a referral has been closed (following RFI/RFS)
- Electronic data interchange limitations (transfer cargo from express mode to other carriers)
- Managing data and response protocols in the following operational situations: co-loading, code-shares, and interline transfers.

Response Protocols

Following the risk assessment carried out on PLACI data elements, the result of the analysis may trigger referrals (Request for Information-RFI, Request for Screening-RFS or Do-Not Load-DNL), as discussed in paragraph 5. The implementation of the actions required by the referral protocols takes place within the operational context of the international air cargo and mail supply chain. To ensure that security and facilitation remain balanced, some operational issues remain to be clarified through testing going forward. These are:

- Response protocols for RFI, RFS and DNL to each type of filer (forwarder, carriers from different business models, postal operators)
- Possible requirements by PLACI authorities for regulated parties to confirm screening actions.
- The existing requirements of the departure country versus the PLACI country for mitigation Opportunities for a Mutual Recognition approach (both Customs and AVSEC regimes)
- The process for immediate information exchange for DNL - in order to prevent simultaneous attacks on multiple aircraft/destinations

Routing and transfer issues

The operational complexities of the international air cargo and mail supply chain need to be taken into account in the development of internationally harmonized and interoperable PLACI processes. The following areas have been identified for further joint testing:

- Interoperability among states (coordination between Customs-Customs, Customs-AVSEC, and/or AVSEC-AVSEC)
- Multi-stop routes and regimes; transfer and transit cargo, particularly when multiple PLACI regimes are involved
- Charters (various models and data availability)
- Multi-modal operations, especially when cargo is transferred from non-air to the air mode at short notice
Operations/Compliance
The introduction of PLACI systems into existing frameworks for air cargo aviation security and Customs necessitates further work on their implications on operations and compliance throughout the international supply chain. As PLACI systems develop, the overlap with existing provisions on both AVSEC and Customs provisions provides both challenges to operations and potential opportunities for harmonization going forward. Further discussions and testing are required on:

- The ability of shipments to move through the supply chain while a risk analysis is underway, including a consideration of possible different operational requirements by air cargo business model
- Harmonization of screening protocols when RFS is issued by the PLACI country/countries
- The impact/process for referrals when shipments are in the control of a party other than the filing party.
- Non-intentional discrepancies between PLACI and pre-arrival ACI data (recognition of PLACI filings as “raw” data).

Future consideration
Whether to include Courier traffic (shipments moved using a courier baggage voucher) for consideration