



FOREWORD



PMWG Chair, SAS – Charlotta Frohm

The airline industry has been severely affected by the pandemic due to the decreased demand for flying all over the world. But our industry is resilient. Step by step, travel restrictions and lockdowns are being phased out and airlines are hard at work preparing for the post -pandemic restart and recovery.

Today, more than ever, the financial situation demands a sharp focus on cashflow and striving for cost efficiency while serving our customers as best we can.

Payment plays a critical role for our airlines not only in terms of value creation with customer reach and payment conversion, but also in cost savings opportunities, with significant amounts being spent by airlines in payment acceptance, processing, and other related costs.

It is time for our airlines to be more in control of payment, to even better serve our customers.

In this context, the PMWG Airlines working group is pleased to share with you a first version of the Airline Payment Framework. This document may help airlines to better position payment in their corporate strategy.

As payment is an integral part of the sales conversion, the Airline Payment Framework may also be useful for our airline commercial resources in touch with sellers and customers.

I would like to thank the members of the Payment Methods Working Group and IATA staff for contributing to this document.

Please let me encourage you to look at the Executive Summary and select the parts you are interested in to make the best use of it.

Have a good reading!





Director, Industry Payment Programs, IATA - Thierry Stucker

Dear Colleagues,

The last eighteen months have been the most challenging in our industry's history. The border closures and travel restrictions put in place by governments in response to COVID-19 have had a devastating impact on passenger numbers and airline ticket sales. It has created an unprecedented situation with extremely high cash burn and negative cash flows for the industry. With airlines forecast to burn through USD 75-to-95 billion in cash during 2021¹, on top of USD 149 billion in 2020, prompt access to revenue from ticket sales continues to be critical for the survival of many airlines. It highlights again the importance of payments and the role payments can play in their corporate strategy.

With travel resuming again, albeit at a different pace depending on the region and market, airlines are rebuilding their networks, schedules and sales channels, while still having large accumulated debts from the COVID-19 crisis. The restart and repair of their balance sheets will be a long journey. They need to become cashflow positive again and avoid cash being trapped or delayed depending on the payment method used.

Payment costs are now larger than distribution costs. So, cost reduction and avoidance in payments are a key dimension for returning to profitability, while satisfying their customers. Payments also need to be a part of an airline's strategy in the restart phase, as it directly drives incoming cashflow.

In this context, the <u>IATA Payment Methods Working Group (PMWG)</u> has been working on developing an Airline Payment Framework to raise industry awareness with regard to considerations to take into account when building, implementing and measuring the success of a payment strategy.

The Airline Payment Framework aims to support airlines with a non-exhaustive list of considerations and range of options for each airline to assess. This first edition addresses the payment instruments landscape and main possible aspects of a payment strategy. Subsequent editions will incorporate other strategic payment areas, including, but not limited to, alternative forms of payment emerging in many markets.

I hope you will agree that payment strategy needs to be elevated to the highest levels of executive leadership and that it deserves to be included among the consolidated corporate objectives.

I would like to thank the PMWG airlines for their guidance in the issuance of this document, and all IATA staff involved for their cooperation and expertise, essential for the creation of this Airline Payment Framework.

1 Source : IATA Chief Economist





Executive Summary

Airlines set goals for their organization that contribute to their development, to the satisfaction of their customers and that protect their financial health.

Airlines usually define first their commercial strategy that sets clear and meaningful targets and actions for the airline workforce.

The success of the commercial strategy is strongly dependent on the success of payment of targeted sales. Sales can only be successfully concluded if the payment has been effective, and the airline has collected efficiently the cash in return of the sales.

The area of payment is getting increasingly complex with a variety of emerging payment instruments and technology solutions, more payment intermediaries and changing regulations- all occurring in a global dimension.

Payment is also much more than just the process of collecting sales. It is a core business component, integrated into distribution, and plays a strategic role for the company's financial health.

Many elements need to be considered by an airline when deciding what it will sell, to whom and how it will get paid.

Therefore, airlines should consider building a payment strategy, integrated into the commercial strategy.

Define the consolidated objectives and the related payment strategy

The airline may consider five dimensions: customer reach (how can the airline provide forms of payment used by its customers), payment conversion (how does the airline make sure there will be no failure at time of payment and risk of loss sale), and on the cost side, cost of payment (per form of payment), potential risks including fraud, and what other costs need to be considered (operational costs, foreign exchange costs, or cost related to the availability of cash).

Issue and release a payment policy for all sales channels that derives from the payment strategy

Having defined the payment strategy, the next step is to convert it into a payment policy for customers and partners, in all sales channels.

Once ready, this payment policy would be not only released externally but also shared and explained internally to the sales workforce so that the payment policy is well understood and well actioned within the markets with customers and partners. A monitoring might be conducted daily or intraday within each sales channel to ensure the payment policies are well implemented and respected.

Enterprise monitoring to build and adjust the payment strategy

Enterprise monitoring, through the definition of metrics and measurement, will enable the airline to determine if the objectives defined in the strategy and translated in the payment policies are well met or whether they need to be adjusted. The feedback loop process is essential for the success of the payment strategy.

This "Airline Payment Framework" document is aimed at raising airline's awareness with regard to considerations airlines may want to take into account when building their payment strategy, when implementing it with their partners and customers and when measuring its performance.

The document is therefore structured into three main pillars:



Airline Payment Strategy

The first section of the document addresses important aspects of payment to define a robust payment strategy. And it illustrates finally what are the potential risks for an airline of not having defined a payment strategy.

Airline Payment Policy

The second section focuses on considerations related to issuing payment policies for the various distribution channels that support the airline payment strategy.

An appendix provides an overview of the forms of payment with key challenges and further considerations.

Airline strategy monitoring

The third part explores the importance, benefits and the features of proper monitoring within the organization that leads to better efficiency, feeding and fine tuning further the airline's payment strategy for incremental outcomes.

Next steps

The Airline Payment Framework is a first version that aims at addressing current payment instruments and main possible aspects related to payment strategy, payment policy and strategy/policy monitoring.

A future, second version, will be targeted to incorporate other strategic payment areas, including but not limited to alternative forms of payment (AFOPs) emerging in many markets.



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Airline Payment Strategy





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Introduction

Many factors should be considered by an airline when deciding what forms of payment to accept. Payment makes sales happen -- or not.

The objective of this document is to raise airlines' awareness with regard to things to take into account when defining their payment strategy. It has been constructed as a toolbox, giving readers the ability to pick and choose from different options and possibilities. Succeeding editions will incorporate other strategic payment areas, including but not limited to a review of alternative forms of payment (AFOPs) emerging in many markets.



Case for change

Historically, payments have not received a lot of attention within the context of airline commercial strategies. That is changing as airlines recognize that costs diverge widely among different payment methods and that payment itself can be a competitive tool. Given this reality, payments and payment strategy needs to be elevated to the executive level of leadership at an airline.

Concurrently, the area of payment is getting increasingly complex, with a variety of emerging payment instruments and technology solutions, more payment intermediaries and changing regulations- all this in a global dimension.

In this fast-changing environment joining payment with the commercial strategy can be a basis for value creation. Benefits can include maximizing customer reach and sales conversion, improving the customer experience, stimulating innovation, while securing the cash flow for airlines, minimizing payment related costs and widening the payment options to the ultimate benefit of end consumers.

In 2019 estimates were made to size the industry payment impact on revenue creation, as well as on expenditures and identify possible areas of cost and process efficiencies, ultimately benefiting consumers. Key learnings, in order of magnitude, were:

- Payment could contribute up to US \$11.7bn of incremental revenue thanks to better payment conversion rates and better acceptance of local payment methods. (source: EDC-IATA 2019)
- Payment was recognized as a major cost factor for airlines, with an estimated magnitude of US \$10.2bn composed of payment acceptance fees, fraud- and risk-related costs, costs of cashflow and cost of payment processing.

In their retailing transformation journey, airlines increasingly sell via multiple channels and face pressure to support multiple payment instruments to respond to end consumers' needs. To increase bookings with new customers and new destinations, they need also to provide a seamless and convenient payment experience to their customers. In addition, airlines sell more and more ancillary goods and services from both their own inventory and from their partners.

The COVID-19 pandemic has not fundamentally changed what is at stake for airlines; however, it appears to have accelerated the evolution of payments trends and complexities without removing foreseen challenges.

On the customer side, expectations have evolved even more with the adoption of alternative and innovative forms of payments in addition to legacy payment instruments.

The widespread common use of smartphones has triggered huge developments in mobile payment technology and infrastructure in a truly short period of time. Mobile wallets, payments in Apps, online payment services, Mobile POS (Point Of Sale) are just some of the examples of new payment services available to customers. Customers increasingly expect airlines to offer such payment instruments when completing a ticket or ancillary sale.

Digital wallets are also challenging traditional financial services. For example, the number of digital wallet users are surpassing the number of deposit holders at banks in the USA.

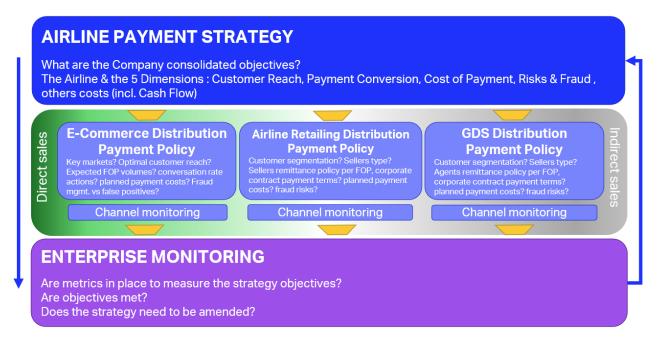
Airlines are also observing behavioral changes and diverging needs between leisure consumers and corporate clients.

 Consumers are looking for trust, security, acceptance of their preferred payment instruments and benefits associated with them.



• Corporate customers are sensitive to costs and processes efficiency with enriched data elements incorporated into their back office and in managing duty of care activities.

On the airline side, the COVID-19 pandemic has shown that during such a crisis, access to cash is essential. Payment instruments that facilitate the collection of funds, quickly and with certainty, while limiting the risks of fraud, are of paramount importance. Using payment instruments that offer better refund experience for the customer is also to be considered. This requires airlines to be aware of the related costs and risks of each payment instrument, for example the credit card holdback risks.



The document is structured into three main sections. The first part of this document will address important aspects of payment to define a robust **payment strategy**.

The second part will focus on considerations related to issuing **payment policies** for the various distribution channels that will support the airline payment strategy.

The third part will explore the importance, benefits, and the features of a proper **monitoring** within the organization that lead to better efficiency, feeding and fine tuning the airline's payment strategy for incremental outcomes.



What you will see in this document?

The Airline Payment Strategy document focuses on five key dimensions to consider when defining an airline's individual payment strategy.

Each individual airline can of course choose which area(s) to focus on, and/or consider other dimensions not detailed in this document. The current payment instruments made available to customers and intermediaries to support the payment strategy are detailed in the appendix section.

Payment as an enabler to creating value and revenues:

- 1. Customer Reach (more customers, more markets, more partners to work with, multi channels)
- 2. Improved customer experience and payment conversion (payment is fully and smoothly integrated in the customer experience)

Payment as an enabler to reduce company costs and increase efficiencies:

- 3. Payment costs
- 4. Cashflow availability, speed, and certainty
- 5. Risks and fraud



1. Customer reach

The airline should first identify the customers it might want to reach to sell transportation services and/or ancillary services. While looking at sales opportunities, it needs also to integrate the payment aspects in the strategic marketing plan.

Do I know my customers and their payment expectations?

- Leisure vs Corporates (segmentation)
- What are the payment instruments available to each of my customer segments?
- Domestic market, main foreign markets, and other foreign markets:

Example: do I support local payment forms? Do I leave it to my partners to support them?

What is my customer journey experience and my sales points?

- Sales of air fares and ancillary products
- Airlines' own ancillary products: seat upgrade, baggage, lounge access, wifi, ...
- Partners: hotel, car rental, other transportation, ...
- When? It may happen at any point in the passenger experience, at time of booking (pre, during, post), at time of airport, transportation (onboard) or even after.
- The sales are made through multiple channels: e-commerce, airline own agencies, airports, travel agents, onboard.

Airline retailing looks after making most products available through its different sales channels.

Airline payment maximizes the customers' ability to use their preferred payment instruments through the different sales channels.

The lack of customer payment instrument support is likely to lead to a lost sales opportunities and a poorer experience for the customer.

Examples:

- Before the flight, the passenger decides to request a last-minute seat upgrade. The gate agent informs
 the passenger, it does not support his/her preferred forms of payment. The passenger is then likely to
 give up on the seat upgrade.
- 2. The passenger has boarded the aircraft and is interested in inflight sales, but the airline does not support his/her payment instruments. The sale may be abandoned.
- 3. An Asia-based customer is in transit via a European airport, on their way to London and is willing to book a car rental through the airline. However, the airline does not support his/her payment instrument. The customer abandons the sale with the airline and decides to use alternative car booking services outside the airline offer.

Offering multiple forms of payment comes with costs and benefits. In defining their individual payment strategy, airlines may want to compare and balance possible revenues with these costs and benefits in order to identify their best options.

Best practice is to design product availability and payment ability at the same time. Any disconnect is likely to result in a waste of resource and in a poor customer experience.



Company strategy objective considerations (examples)

An airline might have different types of strategic objectives, focusing on financial and customer strategic objectives, illustrated with the following examples:

Financial strategic objectives per payment instruments and sales channel (e-commerce, indirect sales channels):

 Financial growth (increase revenue by X % annually, exceed X millions of sales) with breakdown per payment instruments

Customer Strategic Objectives per payment instruments and per sales channels, among others:

With my current customers:

- Expand sales to existing customers (payment instruments breakdown)
- · Expand sales with new payment instruments
- Increase customer retention (payment instruments breakdown)

With new customers:

- Existing products into new markets (strategic objective per payment instrument, local vs non-local)
- Introduce new products in existing and new markets, with existing and new payment instruments
- Expand sales to other markets (breakdown of payment instruments)

What is my targeted reach?

- How do I quantify?
- How do I define and assign objectives for each sales channel?
- How do I measure?

2. Improved customer experience and payment conversion

Boosting the customer experience has the potential to influence, among others, an airline's customer loyalty rate and conversions. In the online retailing world, payment conversion rate is a significant metric. The objective being to increase the revenue per customer, acquire more customers and grow the business of the organization.

Conversion rates are an effective way of comparing the relative performance of multiple channels.

Payment plays a critical role in the sale conversion: abandoning a purchase because of payment-related issues is triggering a lost sale. At best, the customer may try a different sales channel, but the experience will be affected.

This risk of having customers adding flight order and ancillaries to airline online shopping cart but then exiting without completing the payment is one of the biggest headaches in airline e-commerce.

Airlines may look at following areas when building their strategy on payment conversion, among others:

- Do I measure my payment sales conversion?
- Do I understand why my customers do not complete their purchase process?
- How is my customer experience including the payment aspects? Informing the customer from the beginning? at the end?



- Does my airline offer relevant payment methods at the check-out? Are local payment preferences put upfront?
- Does my check out process work on different devices (smartphone, tablet, ...)
- Can the customer provide me with his/her feedback on the customer experience?
- Do I have a customer recovery process?

Payment (focus of the section):

- Do I know my customers' preferences?
- Do I measure the share related to unsuccessful payment authorizations and what is the authorization rate?
- Do I know how much sales are likely lost because of unsuccessful payment authorizations?
- How frequently do I measure and monitor my payment authorization rates? Monthly, weekly, daily, intraday?
- Do I understand why payment authorizations are failing?
- Do I have differences by payment instrument?
- Do I know how to improve payment authorizations (e.g. smart routing, ...)?
- Do I offer alternatives for failed attempts?
- Do I have an improvement process?

Company strategy objective considerations (examples)

- What is my Airline's payment authorization target rate? Is it by payment instrument?
- How do I define and assign objectives for each relevant sales channel?
- How frequently do I measure?

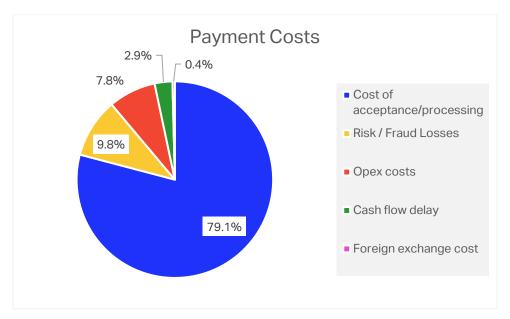
3. Payment costs

The cost of selling and accepting/processing payments can be expensive. Airline business is a global business. It usually requires selling flight and ancillary products using multiple payment instruments, multiple payment intermediaries, multiple currencies as well as triggers operational and compliance costs.

The following costs types may be considered when looking at overall payment costs:

- Merchant fees (incl. processing fees from intermediaries, from IATA, ...)
- Payment authorization / processing costs
- Foreign exchange costs
- Operational costs (e.g. systems, labor, exceptions management, maintenance, ...)
- Compliance costs (e.g. PCI DSS, anti-money laundering, ...)





IATA-EDC estimates '19 - Payment costs order of magnitude

These costs may be also expensive depending on how they are charged, namely if it is percentage charge based on the value or if it is fixed fee.

Airlines may look at the following areas when building their strategy to prioritize cost-efficient payment instruments, among others.

For each payment instrument, my airline could consider/ calculate:

- What is the total cost of payment acceptance (incl. merchant fees), authorization/process supported by my airline? Per payment provider?
- Can I differentiate the financial service cost from the payment processing cost?
- Do I compare the different costs I'm charged between my different acquirers?
- What is the total cost per form of payment provider (example: per card scheme, per processor, etc.)?
- Do I have to provide deposits for using that form of payment? What amount?
- What are the foreign exchange costs supported per form of payment?
- What are the channels and payment methods in which certain currencies apply only?
- Do I have single source or multiple sources for all payments data across all financial and currency processors, payment methods and channels?
- How complex is my back office of payment instruments? Can I identify specific related back-office costs to the various payment methods?
- Do I have any compliance costs depending on payment methods?
- What is the cost of processing refunds per form of payment?

Company strategy objective considerations (examples)

- What is my payment cost target? By payment instrument?
- How do I define and assign objectives for each relevant sales channel?
- Do I measure individual transaction yield incorporating the payment cost?



- Do I measure payment cost vs revenue: i.e. expensive form of payment for a low fare ticket?
- How frequently do I measure?

4. Cashflow availability, speed, and certainty

The COVID-19 pandemic has impacted very significantly the travel industry. With a steep drop in demand and flight cancelations on both domestic and international routes, airlines have reduced capacity on a scale that the industry has never seen before. Many airlines discovered that they had 'card holdback' clauses with their acquirers or saw their credit card holdbacks significantly increase.

In the current environment, airlines are strapped for cash. Cashflow is a prerequisite for survival: Airlines need to rely on cost-efficient forms of payment that address their customers' needs and secure the collection of sales amounts in a minimum amount of time.

Airlines may consider the following factors when defining payment strategy:

- How quickly can I get the money from my sales?
- Are any of the payment instruments subject to chargeback?
- Are the transactions final upon authorization or is there a risk of change later on?
- Is there a risk that my sales are subject to claw back?
- What are the payment instruments that are subject to holdback risk?
- In case of holdback risks in card-based FOPs, are the various conditions leading to holdbacks as well as exit conditions well described in the bilateral contracts signed with each of my acquirers?
- In case of holdbacks in card FOPs, does my bilateral contract with each acquirer describe the calculation methodology?
- Do I compare the various holdback conditions between my different acquirers?
- Do I receive advance information from my acquirers before holdbacks are being applied?
- Do my acquirers use escrow accounts for airline holdbacks and guarantees instead of their own accounts?
- Where do I receive the cash of the sales transactions? Can I repatriate it? at what costs? E.g., do I sell in countries with blocked funds situations? Is the sales and payment team aware?

Company strategy objective considerations (examples)

- What is my target in term of number of days to retrieve cash? by payment instrument?
- What is my exposure to holdbacks, and do I manage it across all my sales channels?
- How do I define and assign objectives for each relevant sales channel?
- How frequently do I measure?

5. Risks and fraud

Airline sales may be concluded in both customer-present and customer-not-present environments. In a non-face-to-face sale such as online sales, the airline often may be exposed to the risk of fraud. To address these risks, controls shall normally be put upfront to avoid unpaid sales.

In absence of upfront detection, Airlines are encouraged to implement, at a minimum, post-transaction detection controls. Some payment instruments are more exposed to fraud than others. Cards, for instance, are subject to frauds, which main types are:



- "card not present" fraud
- counterfeit and skimming fraud
- lost and stolen card fraud
- "card never arrived" fraud
- false application fraud

In case of indirect sales with intermediaries (travel agents, sellers, metasearch, others...) and where money is held in trust by the intermediary, the airline needs to ensure it conducts adequate risk management activities to prevent any risk of unpaid sales.

In the context of sales conducted with IATA travel agents through the BSP, IATA has implemented specific risk management activities, as part of the NewGen ISS program, that enables it to mitigate unpaid sales from agents and settle airlines with on-time settlement.

To bring control and transparency to airlines in indirect sales with IATA agents, IATA has implemented the TIP (Transparency in Payment) program in the BSP that provides to all airlines both post-transaction monitoring as well as API (Application Programming Interface) real-time upfront detection capabilities.

Capitalizing on the performance and outcomes of TIP in the BSP, IATA enables airlines to implement similar controls in both other indirect sales outside the BSP and direct sales.

Airlines may look at the following areas when building their payment strategy to fight against fraud and risks:

Per payment instrument, among others:

- Are validation checks in place on all card number data and all accounts?
- Are authentication processes such as 3DSecure in place for any card sale? CVV (Code x Verification Value)? Address verification?
- For cards, are "manual authorization" prevented by your payment provider?
- For cards, does your POS/online shopping cart have basic fraud filters (configured based on previous order history or flagging transactions above amounts)?
- Are requirements for authenticating online payments like SCA (Strong Customer Authentication in Europe with PSD2) in place in the airline systems and in the systems of your payment providers?
- Are authentication processes in place for other payment instruments than card sales?
- Do your airline systems or payment partners systems include pattern recognition methodology when authorizing and processing payment?
- Conversely, how do I minimize 'false positives'?

Company strategy objective considerations (example)

- What are my targeted maximum volumes of fraud per payment instrument?
- How do I define and assign objectives for each relevant sales channel?
- How frequently do I measure?



Organization aspects

Does my Airline have the adequate organization to plan and execute the payment strategy? Does my organization create the conditions to ensure the successful execution of its payment strategy?

Such a strategy requires a cross-functional and integrated approach from the commercial, distribution, payment, treasury, and finance teams.

Different organization designs are possible e.g. hierarchical, matrix, transversal or project based, ... Eventually the entire team should have at least common goals.

Any disconnect may lead to the strategy only being partially effective, risk of waste of resources and eventually risking a poor customer experience.

Therefore, your organization may consider and work on the following to plan a payment strategy and secure its execution, among others:

- Adopting strategy requires an effective communication process between all teams involved about the strategy itself as well as collecting feedback from teams involved.
- Creating goals with and for the teams involved will help bring structure around the execution of the plan.
- The regular reporting and tracking of goals is essential to the optimal execution of the strategy. The reporting shall include quantitative measures of progress against goals set as well as qualitative feedback.
- Finally, performance management of teams involved shall include aspects of payment strategy execution and monitoring

"Do nothing" scenario

"Doing nothing" is always an option and is by itself a decision. For example, my airline accepts a certain number of payment instruments and I let my customers and partners select the one of their choice. They are likely to choose the one offering them the most benefits. But what will be the impact of their choice on the fees associated with their preferred form of payment and paid by my airline?

Under such a scenario, I may have little control over my costs and risks. This approach can be described as 'the market decides' approach, which may result in unplanned cost increases and counterparty risks,

Such an approach would also impact my commercial objectives, as I might miss sales opportunities by not having an adequate alignment between my products and payment instruments offering.



Conclusion

Provided payment is a key component in commercial conditions, company sales are only acquired with a successful payment. It requires all payment interdependencies with productive and non-productive areas to be considered and well addressed. It requires the airline's senior executives, when developing airline consolidated objectives, to fully integrate payment.

At the heart of the consolidated objectives, the questions are:

- What are the products and services that the airline will sell?
- How? supported by what channel?
- Where?

How the payment will support the what, the how and the where?

What payment instruments are needed? what payment partners are needed?



Appendix

1. Glossary of terms used

2. Payment instruments

The airline may support different forms of payments for the collection of ticket and ancillary sales.

The forms of payment might differ depending on the type of sales, direct sales or indirect sales.

Forms of payment supported in the business-to-consumer segment (airline to end consumer) may not be supported in business-to-business sales (travel agent/ intermediary to airline) and vice versa.

In the B2B model, the travel agent or intermediary will have collected from the end consumer the sales amounts on behalf of the airline and will then use remittance methods, agreed with the airline, to settle the sales amounts. The travel agent may also use the card of the customer to pass through the amount, with the airline as merchant of record, directly to the airline bank account.

In the B2C model, the airline will look after ensuring it supports the forms of payment used by its targeted customers.

Customer Payment Instruments

The customer may use two fundamental types of bank payments: push transactions and pull transactions:

- In push, or credit, transactions the customer instructs their bank to send money from their account to the airline recipients' accounts,
- In pull, or debit, transactions airline recipients' banks extract money from the customer account.

"Pull" Payment Methods

In pull payments, the customer provides signatures or PINs, which grant the airline recipient permission to extract funds.

Cards are "pull "payment methods.

The cards used to pay ticket sales and/or ancillaries may be:

- A consumer card (card primarily offered to individual cardholders using it for individual purpose)
- A commercial card (card issued for business use)
- A lodge card (card specifically designed for business travel expenditure its number is "lodged" with the travel management provider)
- Co-branded cards (airline may get revenues from card scheme partnership)

The direct debit is also a "pull" payment method: The payer authorizes the payee to collect payment from their account.

"Push" payment methods

In the "push" payment method, the customer is in control of the payment transaction. The transaction is honored by the customer's bank and paid to the airline's bank.



It is made on the basis that the customer's bank will only execute the transaction if there is sufficient availability of funds.

Push payment methods are mainly bank transfer and checks.

Real-time payment schemes, or "instant payment systems," are developing more and more globally. They are "push" payments and enable the money to move immediately and irrevocably.

Digital wallets

A digital wallet is a software-based system that securely stores customer payment information and passwords for numerous payment methods and websites. By using a digital wallet, users can complete purchases with near-field communications technology.

Digital wallets can be used in conjunction with mobile payment systems, which allow customers to pay for purchases with their smartphones or other devices.

Digital wallets are not as such a payment method but rather a mean to store payment instruments (card, instant banking) and to trigger payment instruments usage contained in it.

Payment Instruments & Payment processes with Travel Agents

In the indirect sales channel, the intermediary (travel agent, partner) is usually collecting on behalf of the airline the sales and ancillaries amounts from the customer.

BSP Payment process

The customer payment collection by the agent corresponds to money "held in trust" that the agent will have to remit to the airline based on agreed payment terms.

Airlines participating in the BSP benefit from simplification, savings, and enhanced control, to collect travel agent sales. Airlines will receive one settlement from the BSP, covering all BSP participating agents due remittances according to agreed BSP calendar per market. All sales, regardless of if they have been operated through GDS platforms or reported by the airline using NDC standards (between the agent and the airline), will be collected from the BSP agent and settled to the airline.

The BSP participating agents may use any of the remittance methods supported in the BSP.

According to IATA resolution 812 2.1.2, the BSP supports 4 types of authorized payment methods:

- BSP Cash Payment method (agent remitting funds to airlines via IATA BSP using electronic funds transfer or direct debit)
- Customer card payment method (as a "pass through" from the customer account straight to the BSP airline account) – this refers to customer card transactions made against a BSP airline's card acceptance merchant agreement, as detailed in IATA Resolution 890
- IATA EasyPay payment method
- Alternative transfer methods as defined in IATA Resolution 812 Attachment "A", typically an agent own card where the agent issues the transaction with its own card on the airline merchant agreement.

Remittance methods outside the BSP program

The airline may convene with non-IATA agents and other partners any commercial agreement including any payment terms with the forms of payment the Airline may support.



Sales channels

Every channel might bring its key specifics and constraints from payment standpoint

For instance:

- E-commerce is in essence global it requires to support multiple currencies, multiple payment methods including specific market ones (to avoid sales abandonment) and may expose to fraud risk
- Airline agency sales, airport sales and travel agency sales may require supporting local currencies and multiple FOPs
- Onboard sales may be restricted to limited forms of payment and require manual and offline processes, more prone to fraud as authorization may not happen online

Any change on the sale (tickets and/or ancillary), such as cancellation or refunds, in any of the channels require the proper technology to support the sales processing as well as the payment processing.

The airline might associate commercial conditions to the way it will get paid. This will be applied within the appropriate distribution channels:

- End-customer commercial conditions
- Corporate customer commercial conditions
- Agents' commercial conditions





Introduction and Overview

This is the second document in a series of three:

- 1. Airline Payment Strategy
- 2. Airline Payment Policy
- 3. Airline Payment Strategy Monitoring

The document 'Airline Payment Strategy' explores areas an airline may want to consider for setting its payment objectives at the enterprise level. The Airline Payment Policy document addresses the considerations for implementing these strategic objectives across the various sales channels and their specificities. The document 'Airline Payment Strategy Monitoring' explores how to aggregate the measures of these objectives at the enterprise level.

Both 'Payment Policy' and 'Payment Strategy Monitoring' may entail metrics and measurements. The policy related ones will tend to be more frequent and operational in nature, whereas the strategy monitoring aims at consolidating an enterprise perspective, which may not be achieved when looking at individual sales channels.

This Policy document focuses on the strategy implementation aspects taking into consideration the following areas:

- The airline's core sales channels.
- The actors providers & consumer/customers
- The frameworks the governance, the processing systems & tools that support the sales and the collections of airlines funds.

The document aims at raising airlines' awareness regarding a number of payment related features that may be considered when an airline is building or reviewing their payment acceptance policy for each of the channels. For an airline, the payment policy is an actualization of internal cross functional discussion and objectives across the areas of sales/distribution and payments/treasury functions.

The document builds these considerations in the following sequence

- Customer Reach e.g. more customers, more markets, more partners to deal with, multi channels
- Payment conversion e.g. payment is integrated and is part of the customer experience
- Payment financial aspects
 - Costs of payment
 - Cashflow availability
 - Risks and Fraud

When building a payment policy, a critical consideration for the airline is the ability to break down the enterprise strategic objectives by sales channel, develop sales channels specific policies reflecting these objectives, and measuring and performing the compliance of their partners to the policy.

Airlines need to consider how they will enforce their payment policy and what metrics and KPI's need to be established, as well as the time periods for measurement within the context of the airline's risk management strategy and appetite.

Examples of some of these types of monitoring activities and timeframes considerations are:

- Realtime Monitoring Realtime monitoring of agents on the NDC channel or real time monitoring of card sales for GoLite agents in the BSP.
- Monthly/Quarterly Monitoring Monitoring of FOP trends across BSP and NDC channel

It is important for airlines to consider their ability to measure KPI's in their development, communication, and enforcement of the payment policy.



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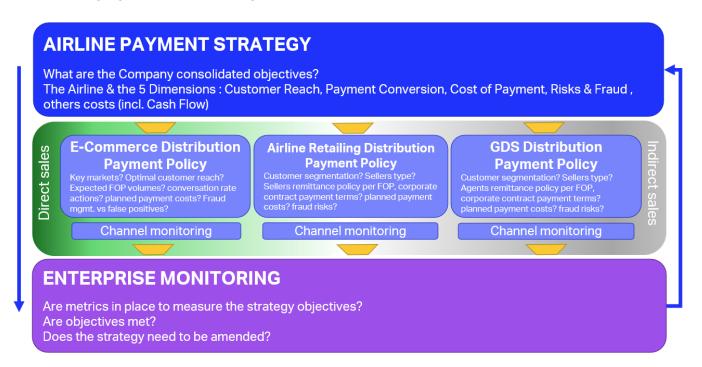
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Structure of this document

In this document, the sales channels are categorized based on the level of the airline's control of the sales process. The highlighted distribution channels (GDS, NDC, e-Commerce) can be viewed as the progressive ability for the airlines to control the sales process and tailoring offers towards the end customers. GDS sales being the level of least airline control and an airline's e-commerce site having the most direct level of airline control of the process, as highlighted in the below diagram.



Each channel is constructed with the following sequence, as appropriate to that channel and highlighting the airline payment policy considerations, that an airline may wish to consider when building their individual policy for that channel:

- **Customer Reach** how do I reach my customers either directly or through a retail network of travel agencies?
- Payment Conversion how are my customers able to use their forms of payment? Either directly and/or through the network of travel agents?
- What are the various Financial Implications to consider by sales channel?
 - Costs of Payment
 - Cashflow Speed and Availability
 - Currency and Foreign Exchange implications
- Risk & Fraud Management
- How do I monitor my sales channels?

Each section builds on the considerations highlighted in the previous section. For example, considerations that are relevant to both GDS and NDC channels and which have already been highlighted in the GDS section, are not duplicated in the NDC section. The NDC section will focus on the features and aspects of NDC that are additional or new considerations above and beyond those in GDS channel.



GDS Distribution

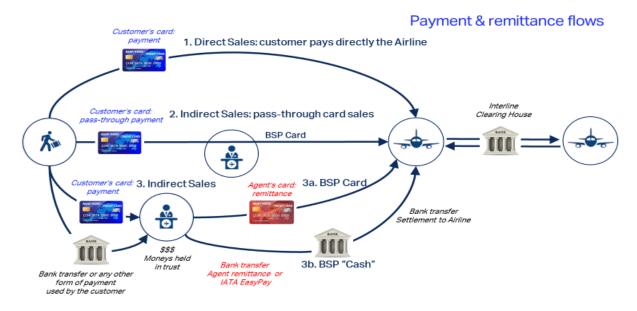
Selling through a network of travel agencies enables airlines to have a wider customer reach complementing the e-commerce channel(s) of the airline. Travel agencies are targeting different customers segments to be considered in the policy. For example, leisure vs. business customers. Travel agencies have also often adapted their businesses to accept customers' local payment instruments, which enables airlines to accept a variety of payment instruments that are not available in their own e-commerce site.

The GDS channel is mainly built on the IATA BSP environment to simplify the selling, reporting and remitting procedures of IATA Accredited Passenger Sales Agents, as well as improve financial control and cash flow for BSP Airlines. In this context the scope of GDS BSP covers the neutral stock that has denoted a ticket that has been issued using an intermediary ticket system provider, or airline stock when reported to the IATA BSP for processing. Although not covered in this document it is also important for airlines to consider all agency sales that are outside of the BSP and the same principles and considerations should be applied.

It is important for airlines to note that when considering a payment policy, IATA EasyPay and certain monitoring activities are not applicable in all markets, as the migration of NewGen ISS is still underway. An asterisk (*) indicates methods that are currently applicable only in NewGen ISS markets.

The sales controls in the GDS BSP environment are the following:

- GDS consolidates airline's inventory and provides access to agents to book and ticket
- Agents are in control of the master order and pass these to airlines
- Agents are responsible for the payment acceptance processing at the time of sale and are responsible for providing the references to the airline



There are 2 ways for the customer payment to be collected:

- By the agent, who then has to remit the funds to the airline through a variety of remittance mechanisms.
 Within this context where funds are 'held in trust' for the airlines and remitted to the airlines on defined calendar frequencies. There are a number of payment-related considerations for airlines to address with agents for the remittance and settlement of these funds.
- Or the Agent is facilitating the direct collection by the airline of a payment made with the card of the customer.
 In this case the agent never holds the 'funds in trust' and only accepts the transaction on behalf of the airline



at time of sale, reports the card related data to the airline via the BSP, for the airline to then claims the fund from its card acquirer.

Agents segmentation by end-customer types

- Travel Management Company (TMC) Corporate travel agencies generally utilize a customer / corporate
 card for the business-related travel. Customer cards are usually a 'pass through' from the end customer to
 the airline by the travel agent. In 2019, 70% of the cards reported to the BSP were commercial cards,
 indicating that TMCs are likely to be the main users of cards as 'pass through'. Airlines may consider as part
 of their commercial relationships with their corporate clients which forms of payment to use.
- Consolidator/ Tour Operators (TO)/ Online Travel Agencies (OTA)'s ² In several instances travel entities are consolidating the total travel package (e.g. air fare, hotel, cruises, car rental, ...). These agents often collect one customer payment for the entire travel package. They then remit the funds collected to the respective service providers with various instruments.

In the context of airfares and IATA Accredited Agents, they use: BSP Cash, IATA EasyPay and Alternative Transfer Methods (ATMs) (such as Agent Cards) to remit the funds to IATA, which then settles the monies collected to the airlines. The airline's payment policy should consider each of these payment mechanisms and the associated agency and provide guidance/policy on their acceptance of these forms of remittance. The IATA accreditation models provide airlines the ability for flexibility through the Remittance Holding Capacity (RHC) and potential tolerance levels across the other forms of payments. Airlines would need to assess their ability to apply flexibility to these agent types. In 2019, only 30% of the cards reported to the BSP were consumer cards, indicating that these types of agencies are more likely to use BSP 'Cash' and IATA EasyPay as remittance method.

Agents' segmentation by IATA accreditation types

As part of the implementation of the NewGen ISS (NGISS) Program, the agency accreditation has been expanded to provide agents with more flexibility that allows them to select the accreditation model that best fits their business. Travel agents can choose from three accreditation models: GoLite, GoStandard and GoGlobal with each model having specific requirements and features.

The basis of the following sections covers the BSPs that have been migrated to the NGISS governance. For the markets outside of NGISS, specific mention will be provided in terms of the risk management tools that are applied in those markets.

For an airline, the first area of consideration from a segmentation perspective is the agent accreditation model and the security of BSP cash sales through agent financial assessments, the provision of financial guarantees and the application of remittance holding capacity (RHC), as well as agents' use of IATA EasyPay or ATMs - Alternative Transfer Methods³.

² TO: Tour Operator, OTA: Online Travel Agent, MSE: Metasearch

³ An ATM is typically an agent own card, which can be virtual or not





Costs of Payment, Cashflow and FX

In the following sections, both costs of payment and cash availability / risks are to be considered as they are intrinsically linked.

Agents - BSP Remittance

In accordance with IATA resolution 812, Airlines have 1 customer payment option (Customer Card) and 3 agent remittance options (BSP 'Cash', IATA EasyPay and Alternative Transfer Methods (ATMs)) available in the BSP:

BSP Cash - The Agent remit the funds collected from the customers to IATA (typically through Bank Transfer or Direct Debit) following a market published remittance calendar. Remittance frequencies are set by the Market however variable remittance options (VMFR -- Voluntary More Frequent Remittance) as well as daily direct debit) are available in certain markets for bilateral implementation with agents. Airlines' will accordingly receive their settlement based on these market frequencies. The cost is a fixed fee per transaction.

IATA EasyPay – EasyPay was developed by IATA as part of the NewGen ISS Passenger Agency Conference Resolution 812 & 812a, included in the BSP core activities. It is available to airlines & agents in a majority of markets⁴.

- o IATA EasyPay is denominated 'BOP' in BSP China but operates similarly as in other markets
- The Agent opens an e-wallet and pre-funds the wallet ahead of the sales. Funds are blocked in the wallet at the time of authorization and settled by IATA to the airline within 48 hours. The transaction is 'final upon authorization' and without chargeback rights
- The cost is fixed fee per transaction

⁴ some exceptions may apply where, e.g., NGISS is not live yet



ATM - commonly referred to as Agent Cards - The travel agent issues the transaction using the Airline Merchant Agreement; ATMs typically follow the standard card process for Authorization of the transaction (through the card network) and for settlement of the funds (through the Airline Acquirer, or in some instance directly from the ATM Payment provider). As per resolution R890, the Agents are allowed to use ATMs provided that:

- The ATM is enrolled with IATA (either by the ATM Provider, or by the Agent directly), and
- The Airline provided its upfront consent to the Agent for the use of that particular ATM
 Cashflow and costs
- o The card products are mainly based on commercial cards.
- Even though these transactions are not customer payments but rather agent remittances, the airlines' acquirer(s) will accumulate them with all other card transactions of the airline for risk assessment and potentially card holdback application.
- o Costs are usually in percentage of the value.

Miscellaneous – (MS) – As defined in resolution PSC 728, MS is a form of payment code aimed at reporting the usage of other payment instruments than the ones listed above and corresponding to local practices in the BSP.

Overview of Remittance Options

	Agent remittance to the Airline			Customer paying the Airline
	BSP Cash	IATA EasyPay	Agent Cards	Customer Cards
Acceptance cost	SCU = 0.0316 USD (avg. 2021 budgeted SCU)	0.53 USD + SCU	0.8-3% + SCU	0.8-3% + SCU
Claw back provision	No claw back can be imposed by Agent	No claw back can be imposed by Agent	Yes, Chargebacks	Yes, Chargebacks
Exposure to unpaid billings	Yes	No	No	No
Exposure to Agent ADMs	Yes	Yes	Yes	Yes
Exposure to Acquirer holdback	No	No	Yes	Yes
GoLite Agents	No	Yes	Yes	Yes
GoStandard Agents	Yes	Yes	Yes	Yes
GoGlobal Agents	Yes	Yes	Yes	Yes

Potential considerations for a Payment Policy

With agents acting as intermediaries between the airline and the end customer, there are a number of items airlines may want to take into account when considering the payment facility in their payment policy:

- Currency Repatriation & Blocked Funds The currency risk is higher than it has been in years. Many central
 banks will impose new restrictions to cross border transfers with possible extreme cases of even seizing
 hard currency from commercial banks. Currency repatriation monitoring activities and advocacy are more
 important than ever. Airlines should report to IATA where possible any early warning indicators and support
 advocacy efforts in markets. Airlines can also subscribe the IATA Currency center for further market
 information
- IATA EasyPay Since IATA EasyPay blocks funds at the time of authorization/ticketing and chargebacks/disputes are not allowed, IATA EasyPay can be considered in a number of use cases:



- Markets or Agents with which the Airline is less familiar
- Agents whose airlines deem them as high risk for cash sales or Group Booking
- Where the airline has opted not to accept the Agent's own cards
 - In the implementation of IATA EasyPay, the airline needs to also consider:
- In the GDS environment and due to technical limitations, the IATA EasyPay authorization is performed using the card authorization process and airlines need to pay close attention to the card setup in each market to make sure the correct configurations are in place. This is only a feature of the GDS setup. IATA EasyPay has the APIs and integrations to perform direct authorisations where card rails are not used.
- Manual entry of a card authorization number may not be prevented for IATA EasyPay transactions as this
 attribute depends on each GDS and is inherited from the card-related services. It is recommended for
 airlines to verify with their respective GDSs.
- ATMs Agent Card & Agent Card Acceptance The rules for passenger sales are defined in resolution 812 & 812a. With the implementation of Transparency In Payment (TIP), IATA also provides airlines with a service that allows them to control the collection of sales through travel agencies through:
 - o A resolution framework to ensure transparency and control for each individual airline
 - o Tools to manage airline consent policy
 - o Tools and reports to monitor compliance with each airline's consent policy

What is my airlines consent policy on agent cards?

- Do I accept ATMs in all my participating BSPs or just in selected markets?
- Do I accept all ATMs, or selected ATMs only?
- o Do I accept for all agents, or selected agents only?
- o Do I apply a cost recovery for the use of particular ATMs and/or for particular agents?
- o Have I communicated my ATM Policy to the agents in those markets?
- o In case additional commercial conditions are attached to ATMs, have I included them in my ATM policy?

Does my Airline use the reporting tools to monitor compliance?

- o How does my airline enforce compliance?
- Does my airline enforce compliance uniformly or do we provide exceptions?
- o Do I utilize the IATA TIP reports?
- Have I considered upfront validation (not available for GDS sales but available for NDC through API)?

Agents - Customer Card Payment

Customer Card as a form of payment is defined in Resolution 866 and is used when the agent issues the transaction on the airline's merchant of record using the card of the customer. Normally these cards are differentiated as consumer cards (leisure travel) and commercial cards (typically corporate cards for business travel). The agent facilitates the airline collecting a card payment directly from the client, by accepting at time of sale the card payment and then reporting its details into the BSP so that it is passed to the airline. With the implementation of PSD2 in the European Union, airlines should be fully aware of local card rules legislation in each market and be aware of their rights/policy to surcharge in these markets.

In accordance with resolution R890, checking the validity of the card is delegated to the agent, and the airline can collect chargebacks from the agent. However, the airline can still be exposed in cases of fraud or in case the agent is not able to remit the funds corresponding to the ADMs (see Fraud & Risk section for further details).

- In which market to accept or not Customer Card? For which card brand(s)?
- Typically, this is not at the individual agent level, but for the entire market
- The prime set-up for card brand acceptance (or non-acceptance) by market is directly in the GDSs systems
 as they control the forms of payment at booking and ticketing. Please note that GDS and IATA's systems are
 currently not interfaced to exchange data on the airlines' card set-up by market.



This is an important element as airlines want to avoid receiving card transactions in markets in which they
don't have an acquirer, don't have commercial agreements to accept specific card brands or don't wish to
accept card payments.

Cash Flow Management – In a number of instances, airlines have been working historically with a reduced number of acquirers with an objective to optimize the number of cash flow sources. However, in light of the COVID crisis, the consolidation of airlines' volumes may trigger the acquirer(s) to apply stringent risk management in the form of card holdbacks. This may in turn have adverse consequences for the airline's cashflow. When planning for their cashflow sources, in the light of the sales restart, airlines may consider a potential distribution of acquirers across markets, distribution channels, etc.

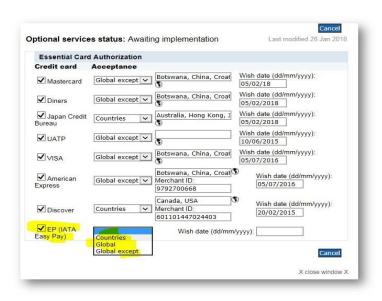
Acquirer(s) Risk Management - In the context of the COVID recovery plan, airlines have had to deal with unprecedented levels of refund requests initiated by customers/travel agents and dispute/chargeback initiated by people paying by card. Due to the time gap between booking/purchase date vs flown date, card acquirers have started to reconsider their level of risk management with airlines. To support this new risk management approach, acquirers have started to renegotiate their contracts with airlines in some of the following areas:

- Requesting further detailed flown data from airlines
- Requesting airlines to provide financial guarantees or pre-fund refund requests from customers as a condition to present a card refund to the card scheme
- Consolidation of volume across channels how does the airline distribute their card volume across their ecommerce and NDC channels.
- Asking Is it possible to diversify the sources of cash flow to mitigate consolidated risk

Card Services in BSP

In general, for card services there are a number of areas of focus airlines should consider in terms of card sales in the BSP. This section will focus on card setup in the BSP and best practices for airlines. The setup of card services in the BSP is a combination of card acceptance in both the GDS and IATA systems.

- It is important that each airline ensures the FOPs on the GDS are correctly setup.
- Card acceptance in GDS and IATA systems are not integrated and require separate setup by the airline
- IATA EasyPay can be used on other card rails like UATP and Mastercard even though FOP CCEP is deactivated.
- Airlines need to work with their GDS to verify these aspects and set-up



Currency & Foreign Exchange (FX)

Controlling the revenue mix in various FOPs and currencies has become increasingly difficult. Airlines currently operate with many regulated and restricted currencies as air fares are being distributed globally. Airlines need to be able to collect and repatriate revenues from countries, where they are potentially not even present. Below is a summary of Industry distribution processes and reference currency rates.





ICER - IATA Consolidated Exchange Rates, (it used to be called as BSR - Bankers Selling Rate). It provides daily updates of exchange rates – for more than 20'000 currency crosses. It is used for converting fares, taxes, and fees to alternate currencies of payment.

ICER rates are sourced mainly from OANDA and local central bank fixings. ICER is the source for calculating the remaining of the IATA rates.

IATA continues to publish two important five-day average rates, to be used in next calendar month settlement processes.

- IROE, IATA Rates of Exchange 5d rate ending on 10th month defining the NUC value
- IATA FDR (ICH) average ending on 25th of the month used to convert passenger interline billings into the settlement currency

Agent/OTA can compare the fare calculated with (IROE&ICER) rates to real time SPOT & FWD rates, to determine the cheapest currency for payment and capture the potential mark-up. As the OTA may not have a ticketing right in a BSP, it needs to issue the ticket using another agent accredited in the specific BSP. The OTA may use an ATM (agency card) to pay the fare. The BSP Issuing Agent will settle via bank transfer to BSP Hinge, and be paid to the issuing carrier following the normal weekly BSP and ICCS settlement calendars. If the airline uses ICCS, sales will be converted at WMR fixing rates to airline's desired currency

Cross-border sales in restricted emerging market currencies

Cross Border Sales in restricted or heavily regulated emerging markets currencies have the potential to increase airlines' currency risks and costs and to create additional operational workload with their repatriation, which may lead to FX losses in repatriation and eventually even to blocked funds.

Even if airfares are settled in a hard currency (USD) country, the cross-border payment risks exist, as our industry has funds currently blocked in certain countries in Africa and the Middle East . Similar risks were observed during the Greece and Cyprus bank crisis with EUR settlements. To address these risks, airlines should monitor this issue, track tickets issued in countries that are not where the travel commences, to spot travel agents intentionally ticketing in these countries.



Risks and Fraud

Agent Risk Management

- A progressive trend in the industry today is that agents are no longer constrained to a physical 'brick and
 mortar' BSP centric approach to sales. Agents today have the tools and structures to allow them to utilize
 point of sales (POS) across multiple BSP's and markets. This brings a new dimension of complexity and risk
 mitigations that are necessary in this new business environment.
- Below are ongoing monitoring and assessment activities that are conducted by IATA for Accredited Agents:
 - Agent Financial Review What are the local financial criteria (LFC), do agents operate in Multi-country, or do they have a high level of risk exposure.
 - Risk Status & Annual Revalidation
 What is the risk status of the agent and have there been any risk events in the past 24 months.
 - Sales Detection What are the real-time sales monitoring and early detection triggers in place for the sales received from the GDS.
 For example, are there a lot of cross border or out of BSP market

(Origin and Destination outside of POS BSP) sales being performed.



- Agents with access to BSP 'cash' as a form of remittance will be granted a maximum capacity, as a monetary
 amount, for their BSP cash sales outstanding to the BSP. This is known as the Remittance Holding Capacity
 (RHC) and will for the majority of agents be calculated based on the average of the three highest periods plus
 100%.
- The chosen accreditation model of the agent will determine the applicable risk management, including which financial assessment will be performed:
 - o GoGlobal (Multi-Country Accreditation) quarterly financial assessment of the head entity
 - GoStandard (Standard Accreditation with BSP 'Cash' Facility) annual financial assessment per local financial criteria, and quarterly assessments for entities with a higher risk exposure
 - GoLite (Standard Accreditation <u>without</u> BSP 'Cash' Facility) no annual financial assessment
- The outcome of the agent's financial assessment and risk history in the BSP will determine the agent's risk status, financial security requirements and applicable RHC calculation.
- Remittances Frequency In certain BSP markets, flexible remittance frequencies schemes are available to
 agents, ranging from daily remittance to bilateral variable remittance on the BSP 'Cash' sales. This provides
 airlines with another level criteria to evaluate agent risk levels appropriately for the sales and remittance of
 the airlines' funds.

Card Fraud Management

In the context of credit card fraud there are a number of considerations for airlines:



• Manual Authorization – the ability for agents to perform a manual card authorization and then enter into the GDS booking systems what is alleged to be an authorization approval code. Neither GDSs, nor the BSP, nor airlines have any means of knowing if it is a valid authorization code. This provides an opportunity for agents to 'force' fake card transactions, fake in the sense that they are not coming from genuine customers.

The card security code (called CVV2/CVC2 or CID depending on the card brand) is printed on the plastic card and meant to prevent the re-use of stolen card numbers. GDSs allow the agent to enter such a code alongside the card number when creating an authorization request but the GDSs will not tell the agent if the issuer adds to the approval code a warning that the card security code does not match. The agent is deprived of this warning signal and the airline is deprived of the ability in some instances to fight and win a chargeback when card scheme rules don't allow an issuer to raise a fraud chargeback if he approved despite a mismatch on the card security code

One must note that lodged card details stored in the corporate customer profile held by an Agent or online-booking tool will not feature a card security code, whose storage is absolutely prohibited by all card schemes.

MasterCard and Visa AVS (Address Validation Service), which American Express calls Enhanced Authorization (EA), allow the card acceptor to enter in the authorization request, the street address of the cardholder. This in turn allows the issuer to verify, alongside the card number and card security code, if the payer knows the cardholder billing address. AVS only applies to US, UK, and CAN issuers, because of the way street addresses are normalized in those countries. At the same time, cards issued in those countries are among the most defrauded in the world. However, GDSs do not offer the option to enter AVS and EA data to all Agents in all BSP markets and tend to restrict it only to the Agents operating in the 3 markets listed before. In addition, GDSs will not tell the Agent if the issuer added to the approval code a warning that the AVS data did not match what they had as the cardholder billing address. Consequently, the Agent is thus deprived of this warning signal.

It is incumbent on the airline, being exposed to the risk of card fraud chargeback, to consider how it can perform fraud detection on the BSP-reported card sales.

- **Local authorizations:** In some BSP markets the card authorization is not done by the GDS, but has a separate process, therefore there is less control
 - It is recommended for Airlines having sales in these markets with specific authorization processes to understand the additional risks they entail.
- Chargebacks Chargebacks are applicable, and airlines need to consider 'double dipping' risks, i.e. the risk that the customer will raise a chargeback to its card issuer, and as well request a refund directly to the Agent. The pandemic has highlighted the value that an open dialogue between an airline and their acquirer provides for a best practice understanding on the overall management of chargebacks. Airliners should consider the opportunity to enter into such dialogues.

Card fraud liability

- Resolution 890 assigns the liability for the non-payment of card transaction to the agent who accepted the card transaction on behalf of the airline.
- The management of the risk that the agent may be unable to cover the related ADM falls under the agency risk management on BSP 'cash' sales.

Considerations for the payment policy

Market reach and payment conversion

- Does my sales network reach all my targeted customers?
- Do my agents accept an adequate number of local forms of payment?

Costs of Payment and Cash flow



- Does my airline have a clear understanding of the payment cost for each remittance method and the customer cards?
- Does my airline have a clear understanding of the cashflow elapsed time for each remittance method and the customer cards?
- Does my airline have a consolidated card exposure evaluation for all transactions, i.e. ATMs (agent cards) and customer cards?
- Does my airline consider utilizing the most effective forms of remittance / forms of payment, i.e. speed and availability of cashflow and costs?

Ticketing Authority and its provision to travel agents.

- Does my airline have a separate policy for agents in domestic/Key Foreign markets?
- Does my airline provide automatic or individual ticketing authority to agents in certain/All BSPs?
- What level of screening does my Airline perform before providing agents ticketing authority?
- **Agent Risk Management Agent Risk Profile** Does my airline have a separate policy for agents in the different Accreditation levels e.g GoLite, GoStandard and GoGlobal agents?
- Does my airline have a separate policy for agents based on BSPs' Local Financial Criteria (LFC) or levels
 of financial security provided or agents' remittance through (VMFR)?
- What is my airline's policy for Agents' PCI DSS compliance for card sales?
- Does my airline consider cross border sales or FX to be a concern for funds conversion and repatriation?

Currency/FX and Cross Border Sales

- FX market volatility can double in many Emerging Markets (EM) currencies and higher FX risk & transaction costs are common
- As the currency/FX topic is both commercial and quite technical in nature, airlines may want to discuss currency risk impact with their sales / distribution, treasury and revenue accounting teams (see appendix for further considerations):

Card Services

See appendix

Channel Monitoring

As presented in the 'Airline Payment Strategy' document, if the airline has set a series of enterprise objectives, they could be assigned to each sales channel, which are then reflected in the channel policy:

- Customer reach and payment conversion objective
- Cost of payment, cashflow and FX
- Risk and fraud

The channel monitoring objective is to:

- Measure the achievement of these objectives for the specific sales channel and measure deviations to the target
- Adjust the policy if the objectives are not met
- Supply the relevant information and business intelligence to the enterprise monitoring



NDC Distribution

This section builds on the considerations highlighted in the GDS channel section of this document. Considerations that are relevant to both channels that have already been highlighted in the GDS section are not duplicated. This section focuses the features and aspects of NDC that are in **addition to or are new considerations** above and beyond those in GDS.

The NDC Channel provides an airline with capabilities to transform the way they retail products and services to corporate, business and leisure travelers. It allows them to move away from the existing third-party distribution model and towards methods and practices more commonly used in their direct sales e-commerce channel. As a result, in the NDC channel the airline receives directly the prospective customer's requests and as a result, is directly responsible for:

- Receiving and interpreting shopping requests of varying complexity
- o Generating appropriate offers as well as identifying ancillary up-sell and cross-sell opportunities
- o Creating orders that represent the "single source of truth" for all parties
- o Processing payment and providing the references to all parties

Within this context, the airline has a number of key considerations to make with regards to channel sellers and how they will authorize the use of the channel, its content and any associated risk:

Authority to sell – In the GDS channel, access to products and services are indirectly managed. The process by which authority is given and rescinded may require a more direct approach to management via the NDC channel.

Payment Acceptance – The NDC channel offers an opportunity for an airline to manage the methods of payment that could be accepted by a given seller for a given order in a given market at a granular level of detail. Moreover, there are choices that can be made relating to direct or indirect payment, as well as whether payment happens via NDC messaging or via other platforms such as an airline's own payment gateway.

Reporting and Agent Risk Management – With these new capabilities allowing authority to sell and accept/make payment depending on the sales channel, a coherent approach to reporting and Agent risk monitoring is crucial in order to ensure an airline has access to the full picture across all channels.

The potential for agents to sell on an airline in both GDS and NDC environments requires the airline to take into account a number of considerations that results from this extension of the agent's sales opportunity:

• Who is the agent performing the sale and what is the level of risk management the airline will perform on the agent's sales?

Will the airline perform real-time sales monitoring on the agent sales and/or track the FOP's trends and payment acceptance for the agent, taking into consideration the risk of agent bust outs and card fraud prevention?

In this context airlines are reporting their NDC BSP 'Cash' transactions to the BSP for collection and also to consider reporting their NDC card transactions to benefit from the BSP services to further enhance their risk and fraud management, TIP detection and reporting, ...

Seller segmentation by types

The first consideration for NDC is the customer segmentation and whether an airline wants to accept both IATA-accredited and non-accredited travel agents on their NDC platform.



	Id. Services	IATA Accreditation Services			
	TIDS	GoLite	GoStandard	GoGlobal	
IDENTIFICATION	~	~	~	~	
TICKET ISSUANCE	×	~	~	~	
FORM OF PAYMENT *	*other forms of payment can be agreed with Airlines				
IATA EasyPay	×	~	~	~	
BSP "Cash"	×	×	~	~	
BSP Credit Cards	×	~	~	~	
MULTI-COUNTRY	×	×	×	~	
FINANCIAL SECURITY	×	Limited	~	~	
FINANCIAL ASSESSMENT	×	×	~	~	

Non-IATA Accredited Agents - In certain circumstances, especially in markets where consolidators have a large presence in the market, it can be beneficial for airlines or their service provider to request TIDS codes for the booking agents to support any further incentive management being performed with the booking agent. In a number of these circumstances there are specific ticketing agents, who can generally be an accredited agent who will perform the ticketing and servicing of the customer.

IATA Accredited Agents – Within the IATA accreditation there are the 3 levels of IATA accreditation (GoGlobal , Go Standard and GoLite). From an airline perspective each accreditation modeling provides varying levels of risk management of the agents. For airlines there is a value to consider with regard to the accreditation levels of agents on their NDC platform and which risk management activities the airline would need to perform on their sales.

Airlines can also consider segmentation on the type of agency that is using the NDC channel

- Travel Management Company (TMC) What are the offers available to TMC's on the airlines' NDC channel
 and can FOPs be used as an additional leverage for the airline in their settlement activities with the TMC. For
 example, can an airline customize content to the TMC including AFOPs (alternative forms of payments) or
 payment terms that can be applied to the payment activities. Within the NDC API standards there are specific
 payment messages that can facilitate local or mutually agreed FOPs between the TMC and airline.
- Consolidator/OTA's/MSE In a number of circumstances travel entities are consolidating the total travel package of the consumer and managing the payment and settlement with differing payment products. In

these circumstances BSP Cash, IEP or ATMs are the main solutions to settling with an airline.

 Customer Payments – Customer cards are usually a pass through from the end customer to the airline by the travel agent.



Or consider segmentation based on accreditation type



Accreditation types

- **Go Standard/Go Global Accredited** Agents with access to all FOPs within the BSP (BSP Cash, cards). Should the airline allow the agent access to BSP on the NDC channel? How will the airline get a comprehensive overview of BSP Cash sales across the BSP (RHC levels) and NDC channels?
- Go Lite Only access to Customer Card, ATMs and IATA EasyPay sales. Generally, but not always smaller agencies, providing the long tails of sales. Should the airline approve airline's sales with cards?
 Will ATMs be accepted by the airline from these agents? Has the airline activated IATA EasyPay for sales with these Agents?

Non - Accreditation types

- TIDS Agents TIDS stands for 'Travel Industry Designator Service'
 - As such these entities mainly receive a designation. Unlike for IATA accredited travels agents, the program does not allow for tickets to be reported in the BSP and IATA does not perform any risk management. As the transactions are not reported in the BSP, ADMs are also not possible.
 - The airlines transacting with TIDS agents, should therefore consider performing their own collection process, risk assessment, dispute management, etc. These are purely bilateral relationships.
 - Does my airline have a specific policy relating to the offer/order receiver vs the entity who collects funds from the traveling customer?
 - Does my airline have a mechanism to track the participants within the offer (eg. accredited agents or TIDS agents)?
 - o Does my airline allow TIDS agents on the NDC platform?
 - How will my airline use TIDS to identify non-accredited point of sales? Will my airline utilize TIDS for commission services for non-accredited agents?
 - If the airline and the agent would though like to benefit from the BSP services, moving to GoLite,
 GoStandard accreditations are options to consider.

Costs of Payment and Cashflow

In the following sections, both costs of payment and cash availability / risks are to be considered as they are intrinsically linked.

Agents - BSP Remittance

In terms of remittance options available to the airline, the current NDC version of 23.1 defines 4 remittance options through the standard API

These first two require BSP integration for the reporting and settlement purposes

- BSP 'cash': reported by
 - GDS sales submitted thru RET file for settlement in BSP
 - Weblink sales (sales submitted by airline thru RET file for settlement in BSP)
 - NDCLink (NDC sales sent in by airline for settlement in BSP)
 - or with Settlement with Orders (SwO)
- IATA EasyPay (BOP in BSP China)



- reported by the GDS to BSP through a RET file
- Or with Settlement with Orders

These next options do not require BSP integration for reporting and settlement, however, they are available in BSP:

- Any form of bilateral agreement between seller and airline
 - Seller's own card, which may be a consumer or corporate card.
- Payment by the client directly to the airline
 - Customer's own card (consumer or corporate)
 - Usage of credit/miles owned by the client
 - Redirection of the client from the seller to the airline's own payment page, where any form of payment instrument may be supported
- An overview of these remittance options is displayed in the appendix

Risks and Fraud

Agent Risk Management

Airlines can also consider remittance types as a risk management approach across agent types, for example

- GoLite Agents In a number of markets, many agents have actively switched to GoLite accreditation, due to
 their inability to provide a financial security for their BSP cash sales. Should airline consider GoLite agents in
 certain markets (e.g., where they are unfamiliar with agents or where there are weaker local financial criteria
 in place)? In these instances, agents will be able to remit with IATA EasyPay or with their agent's own cards,
 as well as by forwarding the customer card details.
- GoStandard Agents An airline will need to consider GoStandard agents' overall access to BSP Cash across BSP and NDC and to what extent the airline will monitor the agents' cash sales. This can be implemented using the IATA risk managing API's available for NDC sales on BSP. Alternatively, an airline could mandate the agents to utilize other FOP such as EasyPay as a cost-effective option for NDC sales where they are unwilling to allow agents to utilize BSP cash on their NDC channel.
- Risk management APIs NDC airlines are also reminded that the Passenger Agency Conference has
 mandated agency risk APIs to be implemented by Resolution R816 section 6& 8 to protect the overall
 community and the BSP.

In the application of these FOP's it is important for airlines to consider the risk management activities that are recommended with each FOP and to perform a cost/benefits analysis to decide the most appropriate FOP for their customer segments.

• **BSP Cash** – With the implementation of BSP Cash airlines can facilitate the services and protections available with the accreditation of the BSP. NDC transactions that are submitted to the BSP for processing are consolidated with the BSP reporting. In this context the airline is responsible to support IATA risk management services. This can be done through API 1& 2 defined above. Airlines can apply the remittance frequencies of the BSP (Daily, VMFR – expand further) to settle their cash on the BSP calendars or based on bilateral agreements with the agent. Airlines that do not submit their NDC transactions to the BSP cannot benefits from BSPLink for their NDC transactions such as ADM.

Provided that for NDC sales the GDS is not there to perform the risk management it performs in the legacy GDS-intermediated model (remove the ticketing authority of an agent as soon as BSP informs the GDS that



the agent is in default), when looking at the implementation of BSP Cash on NDC channels, airlines may want to consider the risk management and real time sales monitoring APIs made available:

- BSP NDC "API 1" for NDC Airlines reporting in the BSP- Agent Validation (Note: mandated through PaConf resolution 850 Section 5&6)
- BSP NDC "API 2" Real Time Sales Monitoring (RTSM) (Note: mandated through PaConf resolution 850 Section 5&6)
- Transparency in Payment (TIP) Upfront Validation API
- NDC EasyPay Direct Authorization API

These API's provide the risk management services that will allow airlines to align the NDC risk management with that of the BSP and integrate their NDC transactions into the BSP reporting services.

• IATA EasyPay – The IATA EasyPay API provides a direct authorization option that does not require GDS integration on cards rails. This removes the risk of the agent 'forcing' the transaction with the manual entry of an alleged authorization code that is prevalent today on the GDS channel and further protects the airline from fraudulent usage. EasyPay automatic blocking of funds at time of ticketing, on behalf of the airlines, secures the funds for airlines with IATA and these funds will be settled to the airline within 48 hours of ticket issuance.

EasyPay provides the airline with a cost-effective payment option for agents in NDC. The benefits of IATA Pay are the following:

Cash Flow Acceleration: 48-96 hours

BSP Payment, does not go via acquirer

Cost-Effective: 0.53 USD per transaction

Globally Available

Secure Payment Option: No Chargebacks

Safer Selling Enabler (RHC)

• Seller's Own Card - Similar to IATA EasyPay, a seller's own card will have the authorization performed by the airline, as opposed to being performed through the GDS in the legacy model. However, in this circumstance airlines need to be aware of and consider the NDC card-paid transaction and associated payment liability. The making of a card transaction in NDC differs vastly from what happens in the legacy GDS-intermediated world, in the sense that the agent no longer accepts the card payment on behalf of the airline by triggering an authorization request usually transported by the GDS, which then takes the approval code as the sign to ticket the transaction (and dismisses any other information such as the notification of a CVV2 or AVS mismatch).

Instead, the airline is in a position to control every step in the making of the card transaction, by conducting a fraud detection routine and by creating the card authorization request, with the possibility to request more action from the NDC seller, such as passing a missing CVV2, or initiating a 3D Secure authentication sequence.

Accordingly, Resolution 890x stipulates the 'payment fraud liability in transactions resulting from an offer' effective 01/09/2020. R 890x stipulates that if the seller prevents the airline from conducting a transaction that is not at risk of fraud chargeback (such as the seller not being able to complete a 3D Secure authentication sequence), the seller incurs the fraud liability. Also, the seller must assist the airline in defending against any commercial chargeback, given that the seller is the one who communicated with the customer at time of sale.

R 890x provides the contractual basis for the airline to assign the fraud payment liability to the NDC seller, within the following framework:



- given that it is a PACONF Agency Resolution, it is only binding for NDC sellers who are also IATA accredited travel agents
- the mechanism associated to PACONF Resolutions to recover an amount on the agent is an ADM
- Given that an ADM can only be raised for a transaction that has been reported into the BSP, airlines which
 want to avail themselves of the protection of the dispositions in R 890x must report a copy of their NDC
 card paid sales into the BSP.
- Airlines can control the correct use of ATMs (i.e. agents' own cards) through the implementation of the TIP API on their NDC channel. This can provide a real-time validation of the nature of the card (i.e.: is it a known agent's own card product?) that the airline can validate against their payment policy for that agent. When allowing cards, such as a seller's own card the Airlines should consider their acquirer's risk management approach and the airline wants to diversify their risk in terms of compounding volumes with a single acquirer and the potential for holdbacks from the acquirer or mass chargeback from the seller.

Bilateral Agreement – Commonly referred to as a pass through, this is where the NDC API provides the messaging format to integrate local FOPs into an airline's NDC platform. The processing and settlement of these FOPS will need to be bilaterally agreed between the airline and the payment provider.

Fraud Management

In NDC, the airline is likely to use its own card payment infrastructure and now has access to more resources than in the GDS environment. The airline may consider leveraging the following assets to reduce its risk:

- Fraud and patterns detection systems
- Strong Customer Authentication when required by law and also when as an option with some/all travel agencies.

If the airline is accepting other forms of payment, it should also consider the fraud detection resources specific to these payment instruments.

Channel Monitoring

As presented in the 'Airline Payment Strategy' document, if the airline has set a series of enterprise objectives, they could be assigned to each sales channel, which are then reflected in the channel policy:

- Customer reach and payment conversion objective
- Cost of payment, cashflow and FX
- Risk and fraud

The channel monitoring objective is to:

- Measure the achievement of these objectives for the specific sales channel and measure deviations to the target
- Adjust the policy if the objectives are not met
- Supply the relevant information and business intelligence to the Enterprise monitoring

In addition, the airline may consider the implications that sales could be arriving from multiple sources for the same sellers (GDS, NDC, airline's own portal) depending on commercial factors such as channel mix / preference, Airlines need to consider how they will monitor this. Are channels to be managed together or separately such that:

- NDC channel monitoring is independent of GDS channel monitoring
- Channel monitoring is Integrated across GDS & NDC
- Channel monitoring develops into a more holistic omni-channel approach including own sales

Current risk profiling products – particularly those related to BSP accreditation and agent risk management – function distinctly. A unified risk management approach will be an important consideration for the airlines.



E-Commerce Distribution

E-commerce channels provide an airline with the ability to directly reach its target buyers, B2C and/or corporates. It enables airlines to maximize sales and address consumers' needs by creating flexible offers and providing convenient customer-centric forms of payment.

- Airline receives all requests and creating offers
- Airline is in full control and ownership of the master order
- Airline is responsible for processing the payment and is responsible for providing travel documents to the buyers

Within this context the airline has a wide variety of payment (policy) options that can be considered.

Customer Segmentation

The first area of consideration from a customer segmentation perspective is the type of buyer, and in many cases – their geographical destination.

- Corporate buyer a company or corporate having specific deals or agreements with the airline for special
 fares for its employees and performing purchase directly with or without involvement of travel agents. In
 many cases such customer is using "card on file", or bilaterally agreed credit balance or top-up account
 conditions (defined by the airline) for payments. Risk level is assessed by the airline when defining the level
 of allowed credit for such clients.
- **B2C buyer** individual purchasing tickets for their own use or for someone else. Wide range of forms of payment can be used in this case, including credit cards, domestic market forms of payment, points/miles. Risk management for such sales is usually defined depending on the payment instrument, if it guarantees the payment collection or not.

Sub-channels

- Airline.com
- Airline mobile sales app
- Sales via metasearch or sales aggregators
- Other channels

In many cases an airline's ability to offer the form of payment convenient to the purchase while ensuring alignment among sub-channels becomes a challenge due to the variety of systems, vendors and tools used for this process.



Appendix - Overview of the forms of payment

Among the variety of forms of payment, the following have to be mentioned as the most frequently used:

- Cash: still actively used, physical cash payment in the airline sales office.
- Credit Cards: one of the most widespread customer electronic form of payment worldwide, including both global brands like VISA, Mastercard, AMEX, and a variety of local country-specific domestic card networks. Most of credit card brands allow to perform authorization of credit and execution of settlement. Intrinsic property of credit cards is the risk management and liability shift definition which airline has to correctly plan to limit its exposure to non-collected payments or chargebacks.
- **Debit Cards:** transaction is completed with authorization and the payment initiation with the customer's account issuing bank. Since funds are secured directly from the customer account the risk level for such transactions are usually lower.
- **Wallets:** while the airline receives the funds from the wallet provider, the actual payer can have a variety of payment instruments, including bank accounts, cards, online banking, etc. Risk management in this case needs to be analyzed separately for different types of wallets.
- Online-Payment and Electronic Funds Transfer (EFT): various methods enabling direct execution
 of payment from the bank account of the payer to the bank account of the seller with online
 confirmation of the transaction.
- Mobile Payment: popular in a number of regions, mobile payment can be linked to the account which
 the payer holds with the mobile service operator, used to complete payments for their purchases
 online.
- Online credits: payment is partially or fully covered by credit line provided by 3rd party credit provider
 online as part of the purchase execution. Risk management for this type of sales is managed by
 airlines in coordination with such 3rd parties to define the acceptable risks.
- Offline payment: popular in some regions, this instrument allows airlines to reserve / hold the booking for a particular period of time, until the buyer completes the transfer of funds using the offline tools (e.g.-- Boleto in Brazil).
- **Installments:** while not a stand-alone form of payment. Payment with installments is made using different forms of payment, in many cases the credit cards, checks, or direct debits. Risk level for this case is either managed directly by the airline accepting instalments, or delegated to financial institutions, also taking the liability for the risk.
- Points / travel Miles

The funds are collected to the airline merchant accounts in many cases registered separate for the different forms of payment and in different currencies and jurisdictions. Depending on the service provider, there are possibilities of the funds' consolidation and currency conversion (DCC/ MCP) at the moment of sales. Usage of such services (DCC/MCP) allows airline to not only obtain funds in the desired currency but also to gain extra revenue on the exchange rate transactions.

Key Challenges

Specific to e-commerce, several challenges should be noted:

- Growing geographical distribution of buyers, requiring access to different forms of payment
- Airlines control tracking and management of payment conversion rates
- Limitations and service fees of service providers of the payment solutions used by the airlines



- Cybersecurity risks and PCI-DSS requirements
- High availability IT service costs
- Ongoing resources requirements for expanding the existing solutions.

Currency and FX – further considerations

- Update the knowledge about latest currency regulations (incl tax) affecting currency repatriation
- Monitor the EM currency receivables mix
- Check alternative hedging options and the costs
- Monitor Agents / Consolidators payment behavior FOP/CCY
 - Dual CCY USD available in Argentina & Nigeria
 - o Remove Agents ticketing authority
- Agent Cross Border Sales Used to be called 'SOTO' Ticket (Sold Outside, Ticketed Outside)
 - Ticket issued and settled in country that is not included in the journey (Origin / Destination). The problem is when SOTO tickets are paid in restricted currencies
 - Currency arbitrage against IATA Reference rate
 - 1. FX market volatility & delayed published rates
 - 2. On/Offshore price difference (ARS, NGN, XAF QAR)
 - 3. 'Black Market' FX rates
 - Interest Arbitrage
 - 1. Earning higher interest with delayed settlement versus domestic booking
 - 2. Interest earned by deposits, FX Forwards or Swaps
 - IATA publishes several important industry reference rates such as ICER (BSR) and IROE (Monthly)

 Fare Construction and CDR and FDR, MMR (Monthly) Interline Settlement (ICH). Most restricted

 EM currency fares filed in USD or EUR, however settlement currency amount determined using ICER.
- Sales Trends
 - Strength of Currency & FX
 - Blocked Funds
 - Point of Sale & Cross border Sales (SOTO tickets)

BSP Card Services – further considerations

- For card setup in BSP airlines should consider, among others:
 - What are the levels of validation performed on card sales at:
 - GDS & IATA Controls Does the airline know the GDS and IATA setup per BSP for card acceptance?
 - Airline E-ticket environment What tables/controls are in place at an airline level for card acceptance in each BSP?
 - Do manual authorizations get processed by the same tables/controls as automated card authorisations?
 - When engaging acquirers risk management airlines should consider, among others:



- What is your Acquiring structure? I.e. how many and what are you using them for? (split global / local sales)
- Do you have a global decision making on acquirer(s) contracting/relationships or is the decisionmaking left to your regional sales? And which function is in charge?
- Do you know if your acquirer applies holdbacks if these moneys are held into escrow accounts or held directly by the acquirer(s)?
- o Do you know the thresholds (value) from which your acquirer(s) will start to apply holdbacks?

Agency Risk Management

The following tools are available for airlines to support their agency risk management in BSP today.

IATA Risk Management **Reports**

Remittance Frequency Report	Scope	Frequency	Platform	Access	Format
Provides information related to BSP market frequency & number of days between end of sales period and remittance date.	Passenger / Per BSP operation	Available on demand	<u>IATA</u> <u>Website</u>	No access request/ approval needed	PDF file
Management Information Report (MIR) Provides information on agents in each BSP with significant deviations in their sales amounts.	Passenger/ USD	Weekly	IATA Customer Portal / BSPlink	Granted by IATA to airline users	CSV/PDF file
Airline Default Summary Report (ADSR) An overview of outstanding/recovered amounts for your airline at regional/country and defaulted agent level.	Passenger & Cargo / USD & Local Currency	Monthly	BSPlink CASSlink	No access request / approval needed	CSV/PDF file
Market Performance Information (MPI) Overall BSP and CASS market performance – financial statistical data for BSP and CASS worldwide including number of transactions and sales volumes.	Passenger & Cargo	Annually	Customer Portal > Documents	No access request/ approval needed	PDF file
Agent Monitoring Report (AMR) Provides visibility on level (%) of utilization of financial security following a pre-set threshold for agents with ticketing authority with your airline.	Passenger/ Local currency Only in ASPAC markets		<u>BSPlink</u>	Granted by IATA to airline users	CSV/PDF file



Forms of Payment in NDC

With the introduction of NDC 23,1 further enhancements to payment options are coming online. As of 23.1 the following payment options are broadly available. These options are general categories with the following definitions:

Online Process - Describes the use of Enhanced Distribution message for payment data exchange.

For example:

- Passing a customer's card details for use in a given payment transaction
- Passing an agent's EasyPay details for use in given payment transaction

		Pay	ment Process			
		Online	Offline			
Payment	Direct	Customer Card Existing Value Store (e.g.) OrderItem Ticket EMD Loyalty Points	Other Customer Payment Methods			
Transaction	Indirect	Alternative Transfer Method (e.g.) 1. Agent Card 1. EasyPay	BSP "Cash" ARC "Cash" Other / Bilateral			

Offline Process - Describes payment data exchange outside of Enhanced Distribution messages. For example:

Requiring customer payment by redirection to an airline's payment gateway Accepting agent payment using a pre-agreed settlement method

At present, the core mechanism to support offline payment in the schemas is "redirection"

In terms of describing this relationship between the Payer and Payee, the following matrix highlights the various options

Direct Payment Transaction - One step Customer → Airline

Indirect Payment Transaction - indirect transaction there are "two or more steps" in the payment flow:

- 1. Customer → Agent
- 2. Agent → Airline.

		Payee			
		Airline	Agent	Customer	
Payer	Customer	Direct	Indirect		
	Agent	Indirect		Indirect	
	Airline	-	Indirect	Direct	

Payment processing steps that facilitate payment do not relate to a single payment transaction between customer and airline.



NDC remittance options

An overview of these remittance options is highlighted below for reference

	Seller remittance to the airline				Customer paying the airline		
	В	SP cash	IATA EasyPay	/BOP (China only)	Bilateral agreement Seller-Airline	Selle r own card (Alternative Transfer Method = ATM)	Consumer or corporate card
Messaging standard	Settlement with RET file	Settlement with Order (SwO)	Settlement with RET file	Settlement with Order (SwO)			
Acceptance cost		0316 US\$ budgeted SCU)	_	.53 US\$ Idgeted SCU)	Airlines costs incurred by processing bilateral payment (B/O internal + external) - fees and/or%	0.8-3% depends on conditions set by acquirer *1	0.8-3% depends on conditions set by acquirer
Speed of data (visibility on cash flow)	daily (HOT file)	real-time (API)	daily (HOT file)	real-time (API)	Airline internal process needed	Business days or 7/7 (depending on the airline and acquirer arrangement)	Business days or 7/7 (depending on the airline and acquirer arrangement)
Speed of cash flow	14.2 days (BSP avg depends on the market settlement calendar) 24-48 hrs		1-48 hrs	Depends on terms agreed Airline collection monitoring needed	from D+1 to flight departure date (or more) depends on conditions set by acquirer and if credit card hold back is applied	from D+1 to flight departure date or more depends on conditions set by acquirer and if credit card hold back is applied	
Control of cash flow	airline in cor	ntrol (governance)	airline in control (governance)		airline in control	acquirer in control (credit card hold back)	acquirer in control (credit card hold back)
Claw back provision Fraud	No claw back clause	ack clause can be imposed by Agent No claw bac		can be imposed by Agent	Depend on terms agreed	Depends on card scheme *2	Yes - fraud chargeback
Claw back provision Commercial dispute	No claw back clause can be imposed by Agent		No claw back clause can be imposed by Agent		Depend on terms agreed	Yes ('service not rendered' chargeback)	Yes ('service not rendered' chargeback)
Exposition to payer's default (risk management)	2020 target for Agency default: 0.012 %		No exposition, as "Pay-as-you-go" solutions		Airline's responsibility (financial review, financial guarantee, risk management)	None	None
Airline in control of incentive paid to payer	Incentive Management Solution (ex: GNR5) proposed by IATA		Incentive Management Solution (ex: GNR5) proposed by IATA		Airline's responsibility Depend on terms agreed	incentive is paid by card issuer to seller	eventual incentive is paid by card issuer to card holder
Complexity of Finance & BO integration	Reconciliation needed	Automated reconciliation	Reconciliation needed	Automated reconciliation	Collection and reconciliation needed, including recovery of short payment	Depends on NDC integration '3	Depends on NDC integration *3
Note s						70/ Master and from 1 to 70/ thur all aution	

^{1:} Agents cards are typically issued on corporate BIN, which drives interchange up. Visa and Mastercard have introduced interchange 'tiers' for Agent corporate card products (Visa: from 0.80 to 2%; MasterCard: from 1 to 2%), thus allowing the airline merchant to discuss what Agent card 2: the current Visa Virtual Payment Program does not allow the issuer to raise a Dispute Condition 10.4: 'Other Froud – Card-Absent Environment'

^{3:} the airline can choose to use the BSP resources (ex: integration of NDC sales into the HOT file in order to ease presentation into the airline revenue accounting system)



Airline Strategy Monitoring





Introduction and Overview

This is the third document in a series of three:

- 1. Airline Payment Strategy
- 2. Airline Payment Policy
- 3. Airline Payment Strategy Monitoring

The document 'Airline Payment Strategy' explores areas an airline may want to consider in setting its objectives at the enterprise level. The "Airline Payment Policy" document addresses the considerations for implementing these strategic objectives across the various sales channels and their specificities.

The document before you, "Airline Payment Strategy Monitoring" explores how to aggregate the measures of these objectives at the enterprise level.

Complementing the 'Payment Strategy' and 'Payment Policies' documents, it can also be a starting point for airlines beginning the journey of designing and implementing their Payment Strategy and Policies.

Strategy objectives are defined as part of the 'Payment Strategy' and are at the enterprise level. Payment policies reflect how the strategy is to be implemented for each sales channel. They have their own monitoring, which serves as a management tool for each sales channel leadership team.

The airline strategy monitoring aggregates the metrics of all sales channels and provides an assessment towards the enterprise strategy objectives.

For example, an airline will only know after it consolidates the metrics for all the sales channels if it meets its objective in terms of card holdback avoidance. The airline's card acquirer consolidates all card flows from all sales channels to assess a holdback need.

It is recommended to assign a function such as payment managers to have the responsibility to perform the aggregation of all metrics monitored, measure them against the strategy objectives, consolidate analysis and to report to the cross-functional leadership team (e.g. CCO, Treasurer, CFO) for further strategic decision making.



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Case for change

Implementing monitoring and measurement of the payment function across all sales channels may help the airline as follows:

Pre-Strategy definition

- Take stock of the current situation
- · Preliminary assessment of the areas of improvement and their respective priorities
- Can serve as inputs to the Strategy objectives definition

Post-Strategy definition

- Assess if the strategy objectives are met for all sales channel aggregated
- Analysis of discrepancies and their reasons, root causes
- Review areas of further improvements
- To inform internally about payment policy performance => drive participation of all the teams, e.g., sales, e-commerce, etc.
- To adjust the payment policy for further value creation/cost reduction
- · Feedback to the strategy if adjustments are required

The logical approach of Airline strategy monitoring is:

- Metrics definition
- · Measurement vs. strategy objectives
- Review and analysis process

Metrics definition and targets measurement

Objective: Create a balanced scorecard of metrics to serve as a guide to both performance assessment and improvement management with value creation. This aims to address the following questions:

- How do we know if the payment strategy and the policies are successful?
- What leading and lagging indicators guide us?

Example: as a lagging indicator, my airline targets a reduction of X millions in merchant fees considering all distribution channels. As leading indicator, my payment policy differentiates conditions for agents and customers using alternative payment method to cards.

 What metrics, targets, review process and review style will most change behaviors (both internal and external) toward the work that will create the most value?

When building the balanced scorecard, the airline may create metrics that address the following considerations:

- Customer Reach
- Payment conversion e.g. payment is integrated and is part of the customer experience
- Payment financial aspects:
 - Costs of payment
 - Cashflow availability
 - o Risks and Fraud



Some of the metrics only make sense when combined for all sales channels. E.g. cashflow delay due card holdback, as Acquirers merge all flows. But the card holdback may have been generated due to a specific channel not staying in the assigned target of card volume, for example.

The following metrics may, among others, enable to measure performance vs policy defined:

Customer Payment instruments	Agent payment instruments & payment processes			
Targeted markets for direct sales channel	Targeted markets for indirect sales channel			
Customer reach (FOP available to customers)	FOP available to agents to remit money held in trust			
Direct sales volumes	Indirect sales volumes			
Customer segmentation	Customer segmentation per Agent type			
FOP volumes per channel	FOP volumes per Agent type			
FOP cost per channel (incl. acceptance cost, payment service provider costs)	Payment cost per FOP per Agent type (incl. acceptance cost, payment service provider costs and cost of Agent remittance methods)			
FOP cost vs Revenue across channel and/or transaction level (Customer payment instruments)	FOP cost vs Revenue across channel and/or transaction level (Agent payment instruments)			
CashFlow delay in direct sales per FOP	Cash flow delay in indirect sales per FOP			
Payment terms per FOP per customer	Payment terms per Agent type			
Fraud volume per channel	Fraud volume per channel per FOP			
FOP Payment default per channel	FOP Payment default per channel			
Payment conversion rate (direct sales)				

The importance of the review process

The Review process may comprise problem-solving sessions where the business examines what was learned since the last review, with data (the metrics), that serve as a basis for ongoing adjustments aiming at improved performance.

After the plans are done and the ideal metrics defined, it may take time for the organization to assemble, routinely report on and begin adjusting course based on the metrics.

Strategy monitoring and control is more than reporting metrics.



Adjustments may be made on defined metrics, however the emphasis should be put on the review process, with the goal being the course adjustments, not measurements.

With a review process in place, the defined metrics are adjusted for the benefit of further cost reduction and value creation.

Feedback to the Strategy

Making the Payment Strategy work requires feedback about organizational performance, followed by using that information to fine-tune the strategy, its objectives, and the payment policies themselves in respective distribution channels.

The monitoring and the root cause analysis of variances may lead to a strategy adjustment and/or rebalancing objectives across the various sales channels.

It enables to conduct in-depth review of how the payment strategy and its related defined policies address the airline's five key dimensions of: customer reach, payment conversion, cost of payment, cash flow availability and risk/fraud.

This will trigger key strategic reviews and decision making concerning how payment strategy could contribute further to secure airline growth and its financial health.

Examples of considerations based on feedback received:

- What are the sales that have been abandoned due to non-supported payment instruments? Where? What are the solutions to put in place to reduce it?
- What are the payment instruments with a higher approval rate that may be prioritized in the payment strategy and the related payment policies? In which channel?
- What actions should be undertaken on others with lower approval rates?
- What payment instruments should I prioritize with my customers or with my agents given their cost-efficiency?
- How should my payment strategy tackle payment instruments with higher risks and fraud ratio?
- What actions to undertake with payment instruments exposed to the risk of cashflow holdback?
- How to prioritize payment instrument with optimal cash flow speed and cost-efficiency?
- How can I improve my operational expenditures costs related to the processing of payment instruments?

