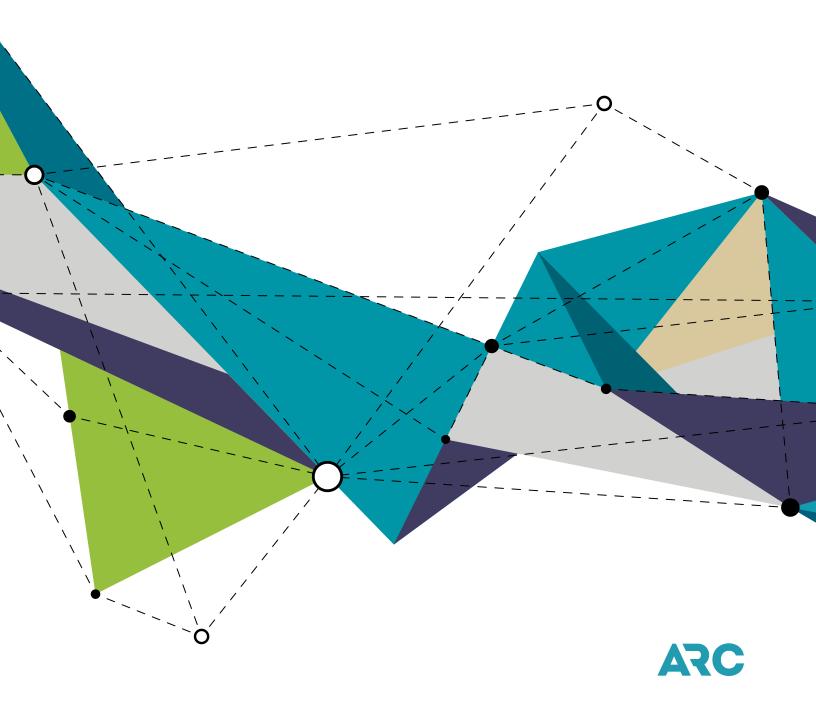
Getting Started with NDC: Considerations for Travel Agencies





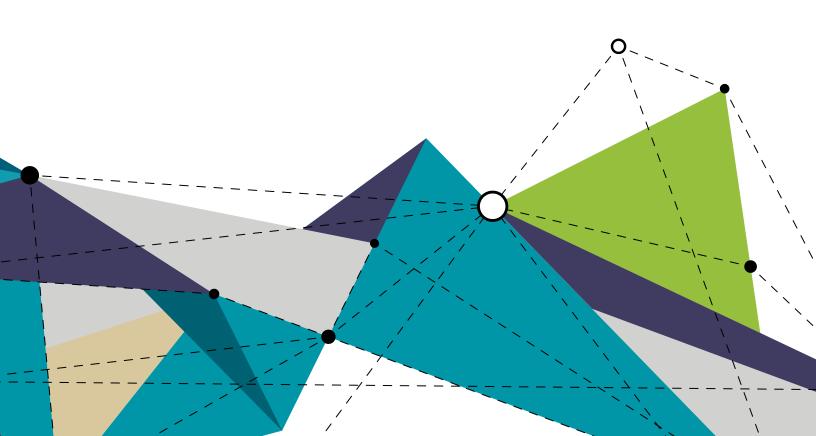
Introduction

The future of air travel distribution is full of possibilities. From ARC's perspective, an evolved distribution environment creates a personalized shopping experience across all channels, within all contexts — offering the right content to the right traveler at the right time. It's relationship-driven and leverages the breadth of available and emerging solutions, including New Distribution Capability (NDC).

For travel agencies, NDC can create opportunities for richer content exchange and customized offers based on bilateral business agreements between the agency and airline. Regardless of your travel agency's strategy for airline partnerships, ARC aims to help your business connect, grow and thrive. If you're uncertain of where to start with NDC, ARC can help your travel agency navigate the evolving distribution landscape.

Successfully implementing NDC requires that both travel agencies and airlines closely examine a variety of factors that will impact their businesses. From ticketing to servicing, credit card billing and debit memos, NDC can have a significant impact on travel agency processes.

The purpose of this document is to provide a starting point to evaluate how NDC may support your travel agency's sales strategy and airline partnerships. While this is not meant to be an exhaustive checklist, we hope it will prompt meaningful conversations within your organization and with potential implementation partners as you build your future retailing strategy.



Getting Started

What is NDC?

New Distribution Capability (NDC) is an XML schema. It's one method an airline can use to communicate information for shopping, offers, orders, payment and servicing to a travel agency. The NDC schema can be used in a direct connection between a travel agency and an airline, via a global distribution system (GDS) or through another technology platform. In airline distribution, NDC is a means to an end: It enables airlines to differentiate their product by delivering richer information about travelers' purchasing options, improving time to market and creating opportunities to personalize offers to customers.

ARC equips travel agencies and airlines with the tools they need to implement NDC — or direct connections of any type — using any schema. Airlines are not required to be IATA NDC certified to settle NDC transactions through ARC. ARC does not require travel agencies to be IATA NDC certified to report NDC transactions, but an airline may require this certification.

Each NDC implementation will vary depending on the unique distribution needs of each agency and airline partner. Detailed discussions of NDC's business impacts — including policies, training and ticketing support, and available resources — will help ensure both parties experience a smooth transition to NDC.

ARC encourages travel agencies to include participants across the value chain in NDC conversations, including airlines; technology companies; corporate travel managers; vendors supporting agency back-office and mid-office solutions; corporate booking and compliance managers; and online booking tool providers.

ARC recently enhanced its trusted, secure settlement platform to support a wide range of NDC implementations, including the following flexible options:

- · Ability to choose ticket stock type and reporting file format
- · Flexible credit card billing options
- Ability to set business rules to support custom airline-agency agreements, specifically around transaction modifications and error corrections
- Output of both NDC and non-NDC transactions on the agency's IAR back-office system (BOS) file

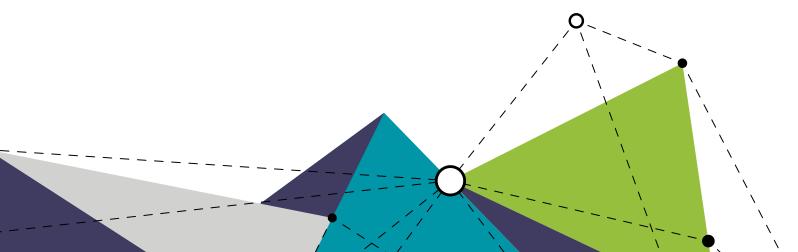


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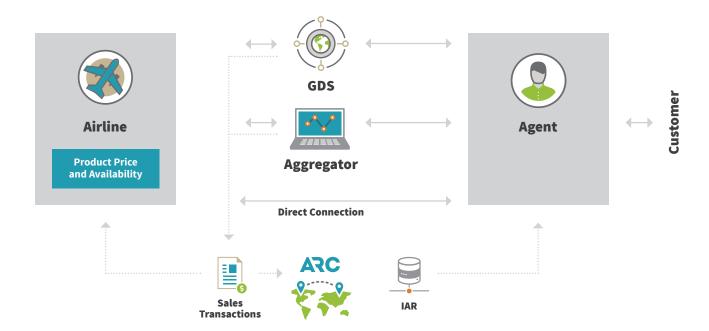
Overview

ARC believes NDC implementations should support a richer, more consistent air travel retailing environment in the travel agency channel, ultimately benefiting the traveler experience. For travel agencies, NDC can open up opportunities for richer content exchange, customized fares, access to ancillary products and greater transparency for the traveler.

When exploring customized NDC partnerships with airlines, it's important for travel agencies to fully understand the potential effects of an NDC implementation — and to thoroughly discuss implementation plans with airline partners. It's also important to include participants from the entire value chain in these conversations, including back-office and corporate booking tool vendors, as well as corporate travel managers.

ARC recommends that travel agencies create a business case with a cost-benefit analysis to determine ROI across the organization and evaluate the impact to downline systems and processes, as well as booking tools. Servicing and customer support should be included in the impact analysis.

Below are several key implementation topics that travel agencies should consider when evaluating a potential NDC implementation.





Travel Agency Considerations

Distribution Channel

ARC encourages travel agencies to reach out to key airline partners to better understand their distribution strategies and plans for NDC in the third-party channel. For many agencies, accessing airline content (both via NDC and traditional filed fares) will take place through your GDS. But for others, connecting directly to the airline may be beneficial.

- Global Distribution System (GDS) GDSs are likely to play an aggregator role for most travel agencies. The GDS will have the ability to display all types of content (fares, fare bundles and ancillaries) and to include content supplied by the airline using the NDC schema.
- **Direct API Connection** Travel agents can connect directly to the airline to shop, order, pay and issue the ticket and ancillary products. In some cases, agents may gain access to content that is not available through the GDS (including fares, fare bundles and ancillaries). This option may be appealing to large travel agencies, travel management companies (TMCs) and online travel agencies (OTAs) with the IT resources to support a direct integration with an airline. An airline can decide to leverage the API for any (or all) parts of the ticketing life cycle. For example, an airline can enable an agency to shop for fares and ancillaries via direct connect, but the rest of the ticketing path is performed by a third party.
- **Aggregator** An aggregator is a technology provider that serves as an intermediary between the airline and the agency community. It provides a platform and IT services to support the transmission of NDC messages. A variety of companies have stepped into this space, including (but not limited to) the traditional GDSs.

In an NDC environment where an airline generates offers, transactions are issued through the airline's host system. It calculates the fare, taxes and fees, meaning that most airlines will not issue debit memos if there is a fare, tax or fee calculation error. This is a benefit to the travel agency, as it could greatly reduce debit memos.

ARC recommends that travel agencies discuss the following topics with airline partners:

- · Will the travel agency connect directly to the airline's host system using NDC messaging? If so, will the agency fund the development to connect directly to the airline or use an aggregator or GDS?
- What messaging and transaction types are supported through the NDC connection?
 - Message types could include shopping, booking, payment, ticketing, refunds and voluntary/involuntary
- · If ancillaries are available via the NDC connection, will the airline utilize an electronic miscellaneous document (EMD) or airline proprietary document for payment and settlement?
- · What content (fares/fare bundles) and ancillaries will be available via NDC?
- · If using an API, what payment types will be supported?
- · Does the airline support post-ticketing servicing (refunds, exchanges) via NDC?
- · How are involuntary changes supported?
- Explore the impact of existing fare discounts, commissions or market share requirements and how they would be impacted by the NDC connection.
- · If connecting directly to the airline using NDC, how will the agency ingest the data to support mid- and back-office tools, corporate booking tools, duty of care tracking and customer invoicing?
- How will credit card chargebacks be managed for NDC content?

Technology Partners

Travel agencies should consider proactively initiating discussions with technology partners, if needed, to facilitate NDC transactions - especially if establishing a direct connection with the airline. For agencies not seeking direct connections with one or more airlines, initiate discussions with your GDSs to validate when they will be ready to support NDC. All major GDSs are IATA Level 3 certified and have rolled out (or have plans to roll out) solutions to support access to airline content.

Agencies will want to evaluate their current GDS agreements to fully understand the impact of issuing NDC transactions.



Supported NDC Message Types

Agencies should discuss NDC roadmaps with airline partners to determine which message types will be supported, and when.

The following NDC message types are available. Please note that airlines may choose to implement all NDC message types at once or, alternatively, take a phased approach.

- Shopping Message Schemas: These schemas allow distribution of airline content offers, including ancillary sales
- · Offer/Order Management
 - Booking: This message type allows the travel agency to confirm the airline transaction once the airline offer is accepted.
 - Payment: This message type enables travel professionals to transmit payment details.
 - Ticketing: This message type initiates the request to issue airline-accountable transactions, fulfilling the order. It is important to validate whether the airline supports transaction voids.
 - Servicing: This message type allows the travel agency to initiate post-sale servicing (refunds and exchanges)
- Interline: Per IATA, no specific NDC schema exists for interline transactions. Airlines can use the shopping and order management schemas to transmit and validate transactions with partners.

In terms of settling ancillary sales, travel agencies need to confirm with each airline how the ancillaries will be issued and processed — on an airline proprietary document, an electronic miscellaneous document (EMD) or miscellaneous charges order (MCO).

Content, Markets and Fare Types Available via NDC

As mentioned above, airlines may take a phased approach to NDC, including the types of content (e.g., public fares, private fares, corporate fares, net/discount fares) and markets (e.g., intra-European, intra-Asian, North American). It is important for agencies to confirm what content will be available via NDC and whether all existing corporate and/or agency deals and contracts will continue to be supported. In an NDC environment, because the airline controls the offer, the calculation of up-front commissions should be determined by the airline, so it's important for both parties to understand the process for calculating any up-front commissions or discounts.

Payment, Reporting, Settlement and Debit Memos

ARC encourages travel agencies to initiate a dialogue with airlines around NDC transaction reporting and settlement. Many airlines plan to process NDC transactions through ARC's trusted

settlement platform, which provides a safe, secure and efficient mechanism for the reporting and settlement of both NDC and non-NDC transactions.

NDC transactions can be included in ARC's sales reporting tool, Interactive Agency Reporting (IAR), and the back-office file (BOS) along with existing non-NDC transactions. This enables travel agencies to reconcile all transaction types simply and efficiently, all in one place. Some airlines have indicated they will not send all transactions to ARC for reporting, so be sure to confirm whether the airline intends to send all transactions, no matter the form of payment, to ARC for reporting and/or settlement.

ARC encourages travel agencies to validate which payments the airline will support, as some airlines will only accept specific forms of payment for NDC transactions. Payment methods include cash, credit cards (e.g., corporate card, virtual card, ghost card), debit cards, local payment methods, airline frequent flyer miles, vouchers or miscellaneous documents.

In many cases, an airline will issue NDC transactions from its host system (the same system that issues its .com and phone sales), so the airline will most likely obtain the credit authorization and may send the transaction through its risk- and credit-scoring tools. This means the airline has the ability to deny the transaction if it does not obtain the proper authorization or approval.

- Travel agencies should validate how credit card chargebacks on NDC transactions will be managed. Will the agency be responsible for chargebacks associated with NDC transactions? If so, will the airline utilize a debit memo (ADM) for collection/resolution of the credit card chargeback?
- Does the airline support 3D Secure for credit card forms of payment for NDC transactions through the travel agency?

One of the many benefits of NDC is the potential elimination of debit memos, depending on the type of NDC implementation the airline pursues. For example, if the airline is pricing the transaction and the agency can't modify or alter it, airlines will no longer need to issue debit memos for recovery of fare, tax or fees. The possible exception is the recovery of credit card chargebacks, referenced above. This is a topic for agents to review with each potential airline partner during NDC discussions. This could provide a significant cost savings by eliminating the need to support debit memo review, dispute and payment.

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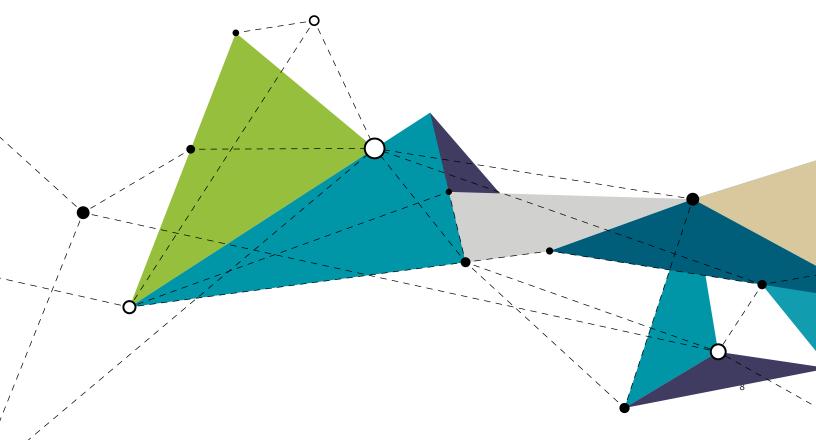


Summary of Business Impacts

Travel agencies will need to evaluate and understand the impacts NDC implementations will have on key business functions and processes. After multiple conversations with a variety of airline-agency partners, the key areas of focus for business impacts include:

- Integration with Booking Tools Will NDC transactions be integrated into existing corporate and other online booking tools? What is the impact to corporate policy applications?
- Integration with Back- and Mid-Office Systems How will data from NDC transactions be integrated into the agency back- and mid-office systems, invoicing programs and other accounting functions?
- Fare and Content Availability, Commissions and Agency
 Contracts Validate what fares and fare bundles are
 available via NDC. How will existing corporate or agency
 discounts be applied? Discuss how up-front commissions
 will be applied. Confirm how NDC transactions will impact
 current revenue-share contracts with the airlines.
- Impact to GDS Market Share Agreements Depending on the NDC implementation, agencies need to understand the impact to existing GDS market share agreements.
- Technical Development and Support If the travel agency is connecting directly to the airline or going through an aggregator that is not your existing GDS, what are the technology needs to implement and support an NDC connection?

- Travel Agency and Corporate Sales Support How will NDC transactions be supported by the airline, in terms of waivers and favors? Will NDC transactions be counted toward airline sales contracts and revenue share?
- Post-Ticketing Services This is a critical factor to consider. Some airlines are implementing NDC in phases and may not have post-ticketing services available. This includes initiating refunds, voluntary and involuntary exchanges, seat changes and upgrades, and involuntary airline cancellations. If these services are not supported during the initial phase, agencies will need to confirm how they will be managed (e.g., via calls directly to the airline or through an online portal). Post-ticketing services are critical, especially to agencies that manage corporations or large volumes of changes in the leisure market. ARC strongly recommends that agencies gain a full understanding of how this will impact client support.
- Transaction Auditing If the airline plans to calculate the fare, taxes and fees, the need for auditing and subsequent debit memos is minimized or eliminated. Travel agents should discuss the liability for any fare, tax, charges and fees
- Credit Card Payment Authorization, Billing, Chargebacks and Risk Management – It's important to confirm the payment methods accepted for NDC transactions. How will credit card chargebacks be managed? Will the airline send credit card chargebacks to the agency even if the airline obtains the authorization? ARC encourages agencies to discuss this with the airline and fully understand who is liable for a credit card chargeback.



ARC's Direct Connect with NDC

With ARC's Direct Connect with NDC solution, airlines and travel agencies can create customized partnerships that leverage NDC. Travel agencies benefit from continued use of ARC's integrated platform while gaining access to richer, more customized airline content. This also gives airlines the opportunity to implement their individual distribution strategies with the support of ARC's trusted settlement solutions.

How does it work?

- Travel agencies issue transactions through the airline's reservation system (either directly or through a technology provider).
- The airline (or their technology provider) creates and delivers the sales file to ARC via secure transmission of a SPRF or RET file.
- Based on the custom agreement between the airline and agency, NDC transactions are validated, billed, stored and output through ARC's distribution and settlement product.
- Travel agency views direct-connect and GDS transactions in IAR and receives the ARC BOS file with all transactions (both direct-connect and GDS transactions).
- · Airline receives the CAT file (both direct-connect and GDS transactions).
- Travel agencies and airlines receive their net cash settlements each week for all transactions with a cash form of payment and net commissions.

If you are ready to get started or have questions about implementing NDC with ARC, contact NDC@arccorp.com

