OpenTravel™ Alliance

2002A Message Specification

Public Review DRAFT

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Abstract

This document presents a brief description of the OTA 2002A Specification RQ/RS message pairs. For a more detailed definition of the messages, please refer to the OTA XML Schema Definition files (XSD's).

Section 1 - The Air Working Group

Section 2 – The Car Working Group

Section 3 – The Hotel Working Group

Section 4 – Package Tour Messages

Section 5 – Golf Messages

Section 6 – Travel Insurance Messages

Mapping documents that demonstrate the changes between 2001B and 2002A messages for the Car Working Group, Hotel Working Group, Package Tour Messages, and Golf Messages will accompany this final specification.

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Air Working Group

The OTA Air Messages for the 2002A specification are designed to complete two Flight Shopping sequences in an eCommerce scenario:

1. Availability led Booking, where the client searches for available flights for each leg of their journey, chooses a flight for each leg, prices the flights and then books.
2. Fare led Availability, where the client performs a Low Fare Search for complete, priced, flight itineraries, chooses one option and then books.

As part of the selling process, Fare Rule Information and Flight Detail information may also need to be available to the client.

Each message pair is designed to constitute an atomic (or stateless) transaction. All information required by the host system to process the request is passed in the request message, so there is no dependency on previous messages. This simplifies implementation for both client and server side developers and allows more scalable systems to be designed.

These are base messages, which will need to be extended in future to cater for new requirements. They are, however, sufficient to enable an airline implement an Internet Booking Engine and expose that functionality to consumers or trading partners.

All OTA messages are stateless, and therefore no context is maintained between messages. Each Request message contains all the information necessary to complete the request and send the response.

The OTA Air Pricing message gets a fare quote and fare breakdown for a specific number and type of passengers travelling on a set of flights on specific dates. No inventory is held. If, on the airline CRS, a Passenger Name Record (PNR) is created as part of the fare quote process, that PNR is ignored and no inventory is held.

The OTA Air Booking message holds inventory for a specific number and type of passengers travelling on a set of flights on specific dates. This will create a PNR on an airline CRS and 'End Transact' causing the inventory to be held. All passengers travel on all segments of a booking. An optional part of the request is to validate that a fare previously quoted is valid at time of booking. If such a request is included, and the fare is not available, then the Book Response message contains an error and no inventory is held.

No post booking messages are currently specified by OTA.

1.1. OTA_AirAvail RQ/RS

This specification addresses the structure, elements, and context of requests and responses for airline flight availability and point of sale information. The Availability Request message requests Flight Availability for a city pair on a specific date for a specific number and type of passengers. Optional request information can include:

- Time / Time Window
- Connecting cities.
- Client Preferences (airlines, cabin, flight types etc.)

The request can be narrowed to request availability for a specific airline, specific flight, or specific booking class on a specific flight.

The availability request message contains similar information to a standard Airline CRS or GDS availability request message.

The Availability Response message contains Flight Availability for a city pair on a specific date. A set of OriginDestinationOptions is returned, each of which contains one or more (connecting) flights that serve the city pair. For each flight the following information is returned:

- Origin and destination airports
- Departure and arrival date/times
- Booking Class availability
- Equipment
- Meal Information
- Codeshare information.

This message contains similar information to a standard airline CRS or GDS availability response message.

1.2. OTA_AirPrice RQ/RS

The Availability Request message requests pricing information for specific flights on specific dates for a specific number and type of passengers. Optional information in the message allows fare restriction preferences and negotiated fare contract codes to be included in the message.
The pricing request contains the information necessary to perform an availability / sell from availability / price series of entries on an airline CRS or GDS.

The Pricing Response message contains a 'Priced Itinerary'. This includes:

- The set of flights sent in the Pricing request message
- Pricing information including taxes and full fare breakdown for each passenger type
- Ticketing information
- Fare Basis Codes and the information necessary to make a Fare Rules entry.

This message contains similar information to a standard airline CRS or GDS itinerary pricing response message.

1.3. OTA_AirRules RQ/RS

The Rules Request message requests text rules for a specific fare basis code for an airline and city pair on a specific date. Optional information negotiated fare contract codes to be included in the message.

The rules request contains similar to a Fare Rules entry on an airline CRS or GDS.

The Rules Response message contains a set of text (human readable) rule information paragraphs. Each paragraph is identified by a rule code.

This message contains similar information to a standard airline CRS or GDS Fare Rules Response message.

1.4. OTA_AirFlightDetails RQ/RS

The Flight Details Request message requests flight leg and codeshare information for a specific flight on a specific date between a city pair.

The rules request contains similar to a Flight Details entry on an airline CRS or GDS.

The Flight Details Response message contains airline, equipment, meal and duration information for each leg of a flight. It also contains codeshare information.

This message contains similar information to a standard airline CRS or GDS Flight Details Response message.

1.5. OTA_AirLowFareSearch RQ/RS

The Low Fare Search Request message requests priced itinerary options for flights between specific city pairs on specific dates for specific numbers and types of passengers. Optional request information can include:

- Time / Time Window
- Connecting cities.
- Client Preferences (airlines, cabin, flight types etc.)

The Low Fare Search request contains similar information to a Low Fare Search entry on an airline CRS or GDS.

The Low Fare Search Response message contains a number of 'Priced Itinerary' options. Each includes:

- A set of available flights matching the client's request.
- Pricing information including taxes and full fare breakdown for each passenger type
- Ticketing information
- Fare Basis Codes and the information necessary to make a rules entry.

This message contains similar information to a standard airline CRS or GDS Low Fare Search Response message.

1.6. OTA_AirBook RQ/RS

The Book Request message requests the system to book a specific itinerary for one or more identified passengers. The message contains optional pricing information, allowing the booking class availability and pricing to be rechecked as part of the booking process.
Optional request information can include:

- Seat and Meal Requests
- SSR, OSI, Remarks

The Low Fare Search request contains similar information to that used to build a Flight only (i.e. no car or hotel segments) PNR on an airline CRS or GDS.

The Book Response message contains the itinerary, passenger and pricing information sent in the request, along with a Booking reference number (PNR Locator) and ticketing information if the booking was successful.

This message contains similar information to a standard airline CRS or GDS Display PNR message.

Car Working Group

The past year has been a very difficult one for all everyone involved in the travel sector. As an industry, we've seen very hard times. Each company is being forced to do more with less. I am proud to see that the commitment to the OTA from the car rental industry has not waned one bit despite the economic realities of the past year. Members from the biggest companies in the industry such as Alamo-National, Avis, Budget, Dollar, Enterprise, Hertz, and Thrifty were joined by travel integrators such as GetThere, Perot Systems and RezLink, to ensure that the 2002A specifications reflected both current XML best practices as well as vast complex business rules. The selfless commitments of these company's and their representatives in the OTA will lead directly to a more cost efficient future for everyone.

Now, more than ever, we must all become efficient and learn to work smarter instead of continuing to work harder and harder. For the travel industry as a whole and the car group in particular, the road to success lies in the implementations of this standard. For only through a standard data exchange format can we really reduce our development costs and do more with less.

The first implementations may be expensive and they may be fraught with changes and use cases we had never anticipated. However, Metcalf's law shows that the value of the network increases as the number of nodes increases. In the same way, the value of this specification and the work already invested will only increase with each implementation. The more times the specification is implemented, the cheaper it will be for all involved. Each implementation will be easier than the last one and will be cheaper each time. The more parties that use this specification, the greater advantage it will be for everyone.

Significant changes have been made with the publication of 2002A Specifications to make use of OTA best practices. *Availability with Rates* and *Reservation* have been substantially modified to use shared components across the OTA working groups. New functionality has been added in the form of *Retrieve*, *Cancel* and *Modify* messages. *Retrieve* and *Cancel* are car-specific extensions of generic OTA messages. *Modify* is a new message set that closely follows the form of the *Reservation* message.

The road to success lies only in the route of interoperability rather than competition. Now more than ever, your input is needed.

2.1. OTA_VehAvailRate RQ/RS

The *Availability with Rates* message set is intended for a simple reservation. This message set messages assumes the user has already performed some kind of location search and has gotten down to a specific rental branch.

Both *Availability with Rates* and *Reservation* messages could be used in any of the following circumstances:

1. Customer is performing a simple booking and will come into the branch office to pick-up and drop off the vehicle.
2. Customer requires a pick-up service at their home or office. In this case the *Off Location Services* element can be used to provide basic information address information as well as special instructions.
3. Customer requires delivery and collection service, where a car will be delivered to a specific location and the keys left in a secure place. Again, the *Off Location Services* element can be used to hold address information as well as special instructions.

Only one set of date/times may be sent for the Availability message. Multiple dates and time will require multiple transactions.

Special equipment, such as hand controls or baby seat can be accommodated through this message set. In 2002A, special equipment can be returned related to a specific car, rather than as part of the more general reservation. Special circumstances such as chaffeur-driven cars are not specifically accommodated in this specification. As demand arises the car working group will create such special needs reservations.

The 2002A release makes extensive use of shared components to make the messages interoperable with other OTA working groups. Examples of such cross-industry components include Customer Information, Payment information and Flight Arrival Details. This commonality and interoperability work makes the OTA specification much more modular and reduces barriers to entry. Element names have been reduced to no more than 25 characters, to shorten the message size. Element sizes have now been given boundaries to make data validation easier. Additional changes can be found in the mapping table document which details changes from OTA Car 2001B specification.

2.2. OTA_VehRes RQ/RS

The *Reservation* message set is intended for a single reservation. This message set messages requires the user to specify the location, either by some kind of location search or by knowledge of the rental facility. This message set messages assumes the user has already performed some kind of location search and pinpointed a specific rental branch.

An *Availability with Rates* message set may have been exchanged prior to the Reservation message set, but this is not required. A vendor may implement a single reservation upon receiving only the reservation message.

The *Reservation* messages could be used in any of the following circumstances:

1. Customer is performing a single booking and will come into the branch office to pick-up and drop off the vehicle.
2. Customer requires a pick-up service at their home or office. In this case the *Off Location Services* element can be used to provide basic information address information as well as special instructions.
3. Customer requires delivery and collection service, where a car will be delivered to a specific location and the keys left in a secure place. Again, the *Off Location Services* element can be used to hold address information as well as special instructions.
4. Rates are already known to the customer or trading partner and only a reservation is needed to communicate the rental need.

Special equipment, such as hand controls or baby seat can be accommodated through this message set. In 2002A, special equipment can be returned related to a specific car, rather than as part of the more general reservation. Special circumstances such as chaffeur-driven cars are not specifically accommodated in this specification. As demand arises the car working group will create such special needs reservations.

To provide the greatest level of message security, trading partners may choose to exchange multiple identification components. For these cases, unique identifiers may be stored in the following containers: Unique id; Consumer Product Code; Vendor ID; Validation Check.

The 2002A release makes extensive use of shared components to make the messages interoperable with other OTA working groups. Examples of such cross-industry components include Customer Information, Payment information and Flight Arrival Details. This commonality and interoperability work makes the OTA specification much more modular and reduces barriers to entry. Element names have been reduced to no more than 25 characters, to shorten the message size. Element sizes have now been given boundaries to make data validation easier. Additional changes can be found in the mapping table document, which details changes from OTA Car 2001B specification.

2.3. OTA_VehRetRes RQ/RS

The *Vehicle Retrieve Reservation* message set is intended for users to display their previously made reservation. This message set will allow a user to retrieve one specific reservation or a list of reservations that match specific criteria. At least one field is required for a reservation match to occur. These fields are unique ID (reservation number) name, phone number or Customer Loyalty number. Trading partners may make additional fields mandatory. In the case where a list of reservations is retrieved, the list will provide key high level information such as dates and times, pick-up location, name and type of class of the vehicle. From the list, the user can then drill down and retrieve one specific reservation.

Vehicle Retrieve Reservation Request and Response could be used in any of the following circumstances:

1. Customer would want to verify all information as being accurate. This reservation may have been made months ago or by a 3rd party. The traveler may desire to verify that the reservation was made accurately and that all information has not changed from the time the reservation was made.
2. Customer is on the road and does not have his itinerary for his next location. Depending on the trading partner, this customer would be able to retrieve the reservation and see their next location or a list of locations that they are going to.
3. Customer may want to modify their reservation. Depending on the trading partner, a *Vehicle Retrieve Reservation* may be required before a *Vehicle Modify* can be done.
4. Customer wants to modify or can an existing reservation, but does not have the Unique ID (reservation number). In this case the retrieve message function could be used to retrieve a list of reservations that matched the search criteria and the customer could then select a single reservation from the list on which to perform further action.

One of the following is minimally required to follow through with *Vehicle Retrieve Reservation Request:* a Unique ID, Customer Loyalty, or PersonName. Many companies may require a combination of these three. Other items that are optional are pickup information, telephone, and vendor.

Vehicle Retrieve Reservation Response may provide the same information as the Vehicle Reservation Response message **.**

2.4. OTA_VehCancel RQ/RS

The *Vehicle Cancel* message set has been extended from the generic OTA cancel functionality. To cancel a reservation, the trading partner or customer must provide the supplier or integrator with the exact Unique ID. If the unique ID is unknown, the trading partner may use the *Retrieve Reservation* message set to search for an exact match. The *Vehicle Cancel* message set does not require a *Retrieve Reservation* message set to be used prior, but may be used in

conjunction with one. The *Vehicle Cancel* message set must be used to cancel a single, specific reservation; it cannot be used to cancel multiple reservations at one time.

The generic cancel message was extended to provide additional details of the vehicle reservation information to the customer. The will aid the customer in understanding the consequences of a cancellation message.

A *Vehicle Cancel* message set can be a single phase or two-phase approach. A single-phase message would be where the user simply requests to “modify this reservation as follows….”. A two-phase message introduces the concept of “what if?” (what if I modify this message as follows?) The response to the first phase will identify any penalties, any subsequent costs, etc. The second phase is where the action is confirmed….”go ahead and do it” or “ignore the request I just sent”

The purpose of the request message is indicated using the Type Attribute:

Initiate - indicates the initial request
Ignore - stop the request
Confirm - to complete the modification

The state of the reservation is then indicated in the response message using the Status Attribute:

Pending –
Ignored –
Cancelled –

2.5. OTA_VehModify RQ/RS

The *Vehicle Modify* message set is intended for users to change information on their desired reservation. This message set assumes that the user has already made a reservation. The *Vehicle Modify* message sets do not require a *Retrieve Reservation* message set to be used prior, but may be used in conjunction with one. The *Vehicle Modify* message set must be used for a single, specific reservation and cannot be used to change multiple reservations at one time. A *Vehicle Modify* message set can be a single phase or two-phase approach. A single-phase message would be where the user simply requests to “modify this reservation as follows….”. A two-phase message introduces the concept of “what if?” (what if I modify this message as follows?) The response to the first phase will identify any penalties, any subsequent costs, etc. The second phase is where the action is confirmed….”go ahead and do it” or “ignore the request I just sent”

The purpose of the request message is indicated using the Type Attribute:

Initiate - indicates the initial request
Ignore - stop the request
Confirm - to complete the modification

The state of the reservation is then indicated in the response message using the Status Attribute:

Pending –
Ignored –
Modified –

Vehicle Modify could be used in any of the following circumstances:

1. Flight may be delayed or cancelled and customer would need to update their reservation arrival.
2. Customer has additional passengers so would need to change the car reserved.
3. Customer now requires special equipment that was not on their original reservation.
4. Customer has changed travel plans to fly in to a different city so will need to adjust the arrival city.
5. Customer has changed travel plan to fly in or out on a different date and/or time so will need to adjust the dates and/or times.
6. Customer originally listed on the reservation is not going so the name on the reservation would need to change.
7. There are many other individual elements that could be changed but are too numerous to list.

Hotel Working Group

3.1. OTA_HotelSearch RQ/RS

The Hotel Search Request message provides the ability to search for a list of hotel properties that meet specified criteria.

This type of request message is often referred to as a 'wide-area search' because it typically searches for a list of hotels within a geographic area that may be fairly constrained or quite broad. For example, a list of all the hotels within New York City would be an extensive property search,potentially yielding a list in excess of 1,000 hotels (figure is not based on any statistical data). Other geographic data, such as proximity to a specific location, landmark, attraction or destination point, could be used to constrain the summary response to a limited number of hotels.

The search criteria must be fashioned in such a way that the response fulfills the criteria and returns enough data to add value, potentially a means for marketing a hotel. A single search request may specify a set of criterion (within a single criteria) to further narrow the list of properties returned. A single search request may also specify multiple criteria to allow a "this, or this" scenario. Properties meeting all criterion in the first criteria will be returned as well as properties meeting all criterion in the second criteria.

Property information returned needs to be more than just the name of the chain and the hotel, and should include sufficient information to be able to select a specific property. Additional data that accompanies the response message assists the individual traveler, the travel agent or other booking source in selecting a target hotel. In addition to identifying the hotel by name and location, that data could include the type of hotel, its rating, a brief description of its services and facilities and any promotions as a means of marketing the property. The data returned can be used to perform a specific availability query on a specific property or multiple properties selected from the list. This functionality is supported today by Central Reservations Systems that are able to do detailed queries once the requestor narrows their choice to the property level.

A wide area search can be implemented across system boundaries; outside of a single hotel chain or a GDS. However, one fundamental issue that affects the capability of doing a universal wide area search is that there must be a contractual agreement between the hotel and the booking source in order to list the property.

The business use case that supports this message identifies a customer or agent (person or system acting on behalf of the customer), that requests a list of properties based on some criteria. The first step in this use case is for the traveler or requesting party to identify the criteria to be used.

The steps of the use case proceed as follows:

- The Customer or agent requests a list of properties based on the desired criteria.
- The system returns a list of properties that meet the criteria.

(The requirement to identify the search criteria needed is effectively a system-level precondition for the message to be formulated, since a search for all the hotels in the world would not be feasible nor a reasonable request).

Further steps could provide an additional refinement of the search by repeating the steps:

- The Customer or agent refines the desired criteria to narrow the list of properties.
- The system returns a list of properties that meet the refined criteria.

Possible business processing errors include:

- No properties are returned that meet the input criteria.
- The input criteria must be changed in order to return the desired information.

Scenario

An OTA member is looking for a hotel for one night in order to attend the meeting that begins at 9:00 am the next day. While the primary request is for "hotels in Alexandria, VA," the member may wish to include some other interest factor, such as distance from DISA offices, distance from Reagan National Airport, proximity to the King Street Metro station, etc. In addition, he may prefer to select a hotel from among those chains that honor a frequent guest membership. When the list of hotels that meet those preferences are returned, the final choice of hotel may be influenced by the attraction of restaurants or art galleries in nearby Old Town Alexandria that are marketed in conjunction with the hotel listing.

3.2. OTA_HotelAvail RQ/RS

The Hotel Availability Request message provides the ability to search for hotel products available for booking. Most commonly, a search for availability is looking for a room that may be available at certain rates, have certain room amenities, be of a specific room type, etc., A request can also be made for a non-room product, such as banquets and meeting rooms. Presumably, an availability request is made with the intent to ultimately book a reservation for an event or for a room stay.

The Hotel Availability Request allows a system to query another system for detailed availability and pricing information for both room and non-room products. A Hotel Availability Request is used in place of a Hotel Search Request when there is a need to identify availability and rate information in addition to the property list.
This specification addresses the functionality of a traditional request for availability of a property or list of properties. It allows a request for 'static' property data published by the hotel, that includes information about the hotel facilities, amenities, services, etc., as well as 'dynamic' (e.g. rate oriented) data. For example, a hotel may have a AAA or AARP rate, but it may not necessarily offer it at all times, which affects the availability of the rate.
There is another business model of 'shopping' searches; a type of search that requires a significant number of systems to be queried in order to accomplish the paradigm of comparing offerings from multiple properties. A 'shopping' transaction differs from the traditional request /response transactions that assume a one-to-one relationship between identification of the hotel property and its availability. The shopping search is not well-supported by many systems, including the GDS's, at the current time. This functionality may be addressed in the future as systems are built that will aggregate data that can be used by search systems at one time.
This availability request can be limited to the individual property level, requiring that the hotel has been identified, in order to be able to perform an availability request and determine the rate and availability at a specific property. It is presumed that the wide area search, or Hotel Search Query, has preceded the availability message to obtain a list of eligible properties. However, a request for availability could be performed on multiple properties simultaneously by specifying multiple hotels. An availability request with search criteria will allow a list of properties to be returned, but with greater property detail, including property info, room/rate info, availability and rules. Due to the amount of information returned for a given property, a Hotel Search Request may be more fitting when only a basic list of properties is required.
The business use cases that this Hotel Availability Request message supports are the following:

- Availability / Single Property - determines the availability within the constraints of specified criteria for a single identified property.
- Availability / Multiple Properties - determines the availability for multiple properties identified by a Hotel Reference along with additional specified criteria.
- Availability / Multiple Properties based on Search Criteria - determines the availability for multiple properties identified by a Hotel Reference along with additional specified criteria.
- Alternate Availability - retrieves a list of properties (with availability) that are alternates to a property that may not be available. [While the specifications enable the capability to return alternate choices, the qualifications of the actual returns are dependent upon the application processing the request.]
- Rate Quotation / Single Property - obtains rate quotes for a room or non-room product or products at a specific property. Returns a list of the rates available at the hotel for the desired dates.
- Rate Quotation / Multiple Property - obtains rate quotes for a room or non-room product or products at multiple properties. Returns a list of rates for the products specified that are available at the hotels for the desired dates.

3.3. OTA_HotelRes RQ/RS

The Hotel Reservation Request message is used to send a request from one booking source to another booking source requesting a hotel reservation. Typically the Hotel Reservation Request message would be used by a Central Reservation System (CRS) Global Distribution System (GDS), Internet bookers, or other travel service providers that does not have the authority to book a reservation directly, but must determine the status of a property prior to booking a reservation. In the travel industry, allotments of inventory become difficult to manage if dispersed to multiple parties, so the control of inventory is usually held by the hotel property or the CRO of the hotel chain.

The Hotel Reservation Request message is often preceded by an Availability Request message. Upon querying the system that holds the inventory and learning that inventory is available at a chosen hotel property, the request is sent to book the hotel services. The Hotel Availability Request/Response messages do not hold inventory when the response of availability is received. The availability query response only provides a snapshot at the time that the request is made. Depending upon the time between determining availability and sending the request to book a reservation, it cannot be assumed that a booking request will be approved.

There is not a requirement to determine availability prior to sending a reservation request. Travel agencies or individual guests may send a request to book a reservation from an Internet site if all the information required for booking is known. The OTA_HotelResRQ message can initiate the first message in the sequence of booking a reservation.

OTA_HotelResRQ – Sends a request for a reservation to another system. All the elements and attributes that constitute the reservation that are known are sent with the request.

OTA_HotelResRS - Returns confirmation that the reservation has been successfully booked, and includes a confirmation or reservation number to identify the reservation. Warnings from business processing rules or errors are returned if the request did not succeed. It may optionally include the updated reservation data.

The message conversation may involve several request/response pairs before the final reservation is booked. During the process, a reservation can be rolled back or cancelled until the point at which the reservation is committed. In the

seamless environment, the reservation system makes a commitment at an interim point but must retract that commitment if the reservation is not completed. For reservations that carry deposit penalties, refund penalties, or are non-cancelable, an interim commitment cannot be made.

The reservation request is an atomic request that can either be approved or denied depending on the status of the hotel inventory or whatever other business reasons that the hotel might have for declining the request.

The first three enumerations of the *ResRequestType* attribute; 1) Initiate, 2) Ignore, 3) Modify, indicate a tentative message and are used before a commitment is made or a reservation contractually incurred. The purpose of the Modify attribute is to change what is being requested. It does not modify an already confirmed booking. A cancellation cannot be made, and no cancellation penalties can be applied, until a message indicating a Commit has taken place. It is encumbent on the receiving system to periodically clean up tentative transactions, particularly in cases where the Ignore is never successfully received.

Once the Commit is specified and a ConfirmationID and/or ReservationID returned in the Reservation Booking Response message, a reservation exists from that point forward. A Committed reservation requires a new message request be initiated in order to change the reservation. By starting with the confirmation number or ReservationID of the existing reservation, the current reservation has been identified.

When a system requests a new tentative reservation that modifies a confirmed reservation, it would not want to cancel the original commitment before being able to confirm the change. The requesting system would need to retain the original reservation while making changes, and the receiving system woud be tasked to process the modification request according to business rules.

3.4. OTA_HotelResNotif RQ/RS

The Hotel Reservation Notification provides a request/response pair of messages to support the functionality of updating other systems with reservation data. The message set assumes a push model, with the originating system pushing the data to another system. The originating system would usually be a booking source, such as a Global Distribution System (GDS), a Central Reservation System (CRS) or some other agent of the hotel.

The business model assumes that the originating system either has the authority to take a reservation, or is passing along a message from such a system. The message is a notification of the creation, modification, or cancellation of a reservation, and does not require the receiving system to confirm the booking, only the receipt of the message. The responding system may add its own data (such as its own confirmation ID) and include that data in the response message

The originating system will send a report using the OTA_HotelResNotifRQ message. The receiving system will acknowledge its receipt of that report using the OTA_HotelResNotifRS message.

OTA_HotelResNotifRQ – Sends a reservation to another system. All the elements and attributes are optional, unless otherwise stated as required.

OTA_HotelResNotifRS - Returns acknowledgement that the reservation has been successfully received, or includes Warnings from business processing rules or errors if the request did not succeed. It may optionally include the updated reservation data.

3.5. OTA_HotelGetMsg RQ/RS

The Get Message request/response pair of messages permit a system that normally receives notifications to ask for a re-transmission of a message.

The business model assumes that the requesting system either receives messages that are numbered sequentially, and may ask for a message to be re-sent. In the event that the receiving system receives a message that is not in contiguous numerical sequence, this message set can be used to retrieve missing messages, or to ask for a retransmission of data that for some reason was not cleanly received.

The originating system will send a request using the OTA_HotelGetMsgRQ message. The receiving system will acknowledge and respond with the OTA_HotelGetMsgRS message. The OTA_GetMsgInfo RQ/RS messages have been deprecated – the functionality of these messages have been included in the OTA_GetMsg RQ/RS messages.

3.6. OTA_HotelCommNotif RQ/RS

Commissions provides a request/response pair of messages to support the functionality of updating other systems with commissions to be paid. The message set assumes a push model, with the reporting system (typically a Property Management System – PMS) pushing the data to the Management Company or Central Reservation Office that is responsible for paying the commissions, or one of these entities pushing the data to a consolidator contracted to pay commissions.

In the push model, the originating system will send a report using the OTA_HotelCommNotifRQ message. The receiving system will acknowledge its receipt of that report using the OTA_HotelCommNotifRS message. All message responses include the request identification. Responses may be returned in any order.

3.7. OTA_HotelStayInfoNotif RQ/RS

Stay Information Notification provides a request/response pair of messages to support the functionality of updating other systems with Guest Stay Information. The message set assumes a push model, with the reporting system (typically a Property Management System – PMS) pushing the data to the Management Company or Central Reservation Office that is responsible for accumulating the information

In the push model, the originating system will send a report using the OTA_HotelStayInfoNotifRQ message. The receiving system will acknowledge its receipt of that report using the OTA_HotelStayInfoNotifRS message. All message responses include the request identification. Responses may be returned in any order.

3.8. OTA_HotelStats/ OTA_HotelStatsNotif RQ/RS

Statistics provides two separate request/response pairs of messages to support the functionality of updating other systems with statistical data. The first message set assumes a push model, with the reporting system (typically a Property Management System – PMS) pushing the data to the Management Company or Central Reservation Office. The second message set assumes a pull model, where the centralized system requests a specific report (as agreed by trading partners) for a specific fiscal date.

In the push model, the originating system will send a report using the OTA_HotelStatsNotifRQ message. The receiving system will acknowledge its receipt of that report using the OTA_HotelStatsNotifRS message.

In the pull model, the central system will request a report using the OTA_HotelStatsRQ message. In this message, the report and fiscal date are identified. The receiving system (typically a PMS) responds with the OTA_HotelStatsRS message, which includes the report itself. All messages assumes the no state, meaning that the querying system will initiate the transaction and expect an response from the queried system. All message responses include the request identification. Responses may be returned in any order.

OTA_HotelStatsNotifRQ – Sends a report to another system. All the elements and attributes are optional, unless otherwise stated as required.

OTA_HotelStatsNotifRS - Returns acknowledgement that the report has been successfully received, or includes Warnings from business processing rules or errors if the request did not succeed.

OTA_HotelStatsRQ – Sends a request for a report to another system. All the elements and attributes are optional, unless otherwise stated as required.

OTA_HotelStatsRS - Returns the requested report if the request can be processed, or includes Warnings from business processing rules or Errors if the request did not succeed.

3.9. OTA_MeetingProfile RQ/RS

Meeting Profile provides a request/response pair of messages to support the functionality of creating and updating other systems with Meeting Profile or Group business data. The message sets assumes a push model, with the originating system pushing the data to another system. The originating system would usually be a meeting source, such as a Sales and Catering system or an RFP site, with the receiving system being a PMS or another Sales and Catering system.

The business model assumes that the originating system either has the authority to take a reservation, or is passing along a message from such a system. The message is a notification of the creation, modification, or cancellation of a meeting, and does not require the receiving system to confirm the booking, only the receipt of the message. The responding system may add its own data (such as its own confirmation ID) and include that data in the response message

The syntax of the root elements of the payload document used to exchange a create meeting profile request are enumerated as follows:

<OTA_CreateMeetingProfileRQ> - Requests the receiving system to accept creation of a meeting. All pertanent details about the meeting are included.

<OTA_CreateMeetingProfileRS>[1] - Returns acknowledgement of the request and can include additional information (reservationID). The response message may include Warnings from business processing rules, or Errors if the

[1] The OTA_CreateRS is a generic message defined in the OTA 2001A Specification.

request did not succeed. This generic OTA class has been extended by adding the MeetingProfile object to allow synchronous data exchange.

An additional request/response pair of messages is supported that provides the functionality to update a previously received **<OTA_CreateMeetingProfileRQ>** request. This message pair supports sending only the information that needs to be added or changed.

<OTA_UpdateMeetingProfileRQ>[2] - Requests the receiving system to accept a modification to a previously sent creat meeting profile. Only the information that is being added or changed needs to be sent. This message utilizes the XPATH syntax to indicate where or what data should be added/changed.

<OTA_UpdateMeetingProfileRS>[3] - Returns acknowledgement of the request and can include additional information (reservationID). The response message may include Warnings from business processing rules, or Errors if the request did not succeed.

3.10. OTA_HotelAvailNotif RQ/RS

The Availability Notification message notifies a booking source of the status of availability at a specific hotel property. Booking a reservation at a hotel is often affected by systems using yield management tables to determine the availability of a specific rate at a given time. Therefore, the Availability Notification message is often sent in conjunction with two other messages: a Rate Amount Notification message, that communicates the rates that apply to the availability, and a Booking Rule Notification message, that communicates the restrictions that apply to the availability and rates.

These messages include a complex set of controls that indicate whether the hotel has available inventory; that is, closed or open for booking. The RateHurdleStatusMessage element establishes an open/closed situation based upon the number of units available. If a hotel is open, status messages communicate the rate at which those bookings can be made. In addition, booking restrictions that apply to each individual rate, such as a minimum length of stay (LOS) must also be communicated to the booking agent so that the hotel guest is informed of all the regulations that govern their reservation.

Inventory is generally considered a physical count, and availability a commitment to sell a room at a specific rate or plan. The physical inventory is the basis by which counts are assigned to the availability. But availability may also depend upon rate plans, as a system may carry a discrete inventory, or an inventory count in association with different rates. Thus, the superset of the inventory may be greater than the physical count, with the actual number of rooms counted down when they are sold.

The status messages in the Availability Notification message also communicate inventory (booking) limits set by Yield and Revenue management systems such as the number of reservations that can be taken for a certain day, and the threshold at which the hotel is closed. A Booking Limit Status Message may even define what can be done after a status is set, such as “Take four more reservations after this status is set."

A system may choose not to synchronize with actual inventory numbers, but with a threshold. Nevertheless, it is critical that booking systems are synchronized with common thresholds, regardless of whether they are derived from virtual or real inventory.

The Availability Notification message uses the StatusApplicationControl to set the status for an inventory block, a rate plan or an inventory code. The attributes InventoryCodeType, RatePlanCodeType, and InventoryBlockCodeType determine whether the message involves a single code, or a grouping of codes.

The Override attribute allows a reservation system to make a change on controls applied at the level of the Property Management System. For example, a CRS may allowed to make manual changes while processing bookings during the day, but when full optimization is done, typically during the night, this Boolean attribute determines whether to retain the changes made. This could be applied to override all status messages and is found in the Status Application Control class.

3.11. OTA_HotelBookingRuleNotif RQ/RS

The Hotel Booking Rule Notification message communicates the rules and restrictions associated with the general availability or rates at a hotel to a booking source. The application of a booking rule may narrow the availability of inventory at a specific hotel property. For example, a hotel may be accepting reservations for a two-night or three-night stay, but will not accept a reservation for a one-night stay. This situation may be driven by the use of a yield management system that affects the availability of a specific rate at a given time. The Booking Rule Notification message is often sent in conjunction with two other messages: the Availability Notification that communicates the status of availability at a specific hotel property, and the Rate Amount Notification message that communicates the rates that the booking restrictions must be applied to.

[2] The OTA_UpdateRQ is a generic message defined in the OTA 2001A Specification.
[3] The OTA_UpdateRQ is a generic message defined in the OTA 2001A Specification.

The Booking Rule Notification message uses the StatusApplicationControl to indicate the inventory block, rate plan or inventory code that the booking rules apply to. Each BookingRule is potentially a set of different types of booking restrictions. The attributes InventoryCodeType, RatePlanCodeType, and InventoryBlockCodeType determine whether the message involves a single code, or a grouping of codes. In addition, the booking restrictions that apply to each individual rate may include such factors as a minimum length of stay (LOS), or specific days of the week that they are applicable (DOWPattern) .

These messages may be used to define multiple rules and restrictions applied to a rate plan. For example, it can set absolute dates during which a restriction is to be applied. Alternatively, a Booking Rule can define the minimum offset of time as well as the maximum offset of time required prior to a guest's arrival prior when a restriction is to be applied, or during which a booking can be made. The minimum and maximum advance requirements are not mutually exclusive, and can be used in combination. The Absolute Deadline and/or the Advance Booking attributes may be used to set applicable restrictions to booking dates.

The Booking Rule Notification message can be used to communicate the types of guarantees that are accepted for a booking, to indicate whether a reservation can be modified or cancelled, and if a refund of a deposit is allowed in the case of a cancellation. The GuaranteeType is an enumerated type that indicates whether a guarantee is required, or if it is required, the form of the guarantee, such as a credit card, debit card or voucher. In some cases, an actual deposit is required. In other cases, supplying a Profile, that provides the identification of a frequent guest by membership or loyalty program number, may be sufficient for a guarantee.

The CancelPenalties element defines a collection of restrictions and policies for payments made to a hotel in case of cancellation. It is also used to specify the cancellation fee or penalties imposed by the booking restrictions that would be applied when a reservation is NOT canceled, as in the case of a no-show. Cancellation penalties may be applied within a specified time frame either prior to arrival, or after the booking has been made. Likewise, the Required Payments `<RequiredPaymts>` element is used to specify a payment obligation, such as a deposit due, along with the deadline for the payment. The RetributionType indicates the action taken when the deadline has been exceeded, such as cancellation of a reservation when a required payment is not made.

3.12. OTA_HotelInvCountNotif RQ/RS

The Inventory Count Notification message notifies a booking source of the amount of inventory available at a specific hotel property. It allows the Property Management System and Central Reservation Systems or other booking sources to synchronize the number of inventory items available for sale between them.

When a new hotel is opened for the first time, the Inventory Notification message would be used to supply the reservations systems with descriptions of rooms in the hotel, as well as non-room products that are subject to inventory as well. The Inventory Count Notification is used to send base inventory levels by inventory code, (e.g.: room type code) to establish the physical inventory count. An Inventory Notification should always precede an Inventory Count Notification to establish the existence of inventory codes in the receiving system.

The physical inventory is the basis by which availability is determined. However, additional calculations figure into assigning the inventory counts for availability. Availability is a commitment to sell a room at a specific rate or plan. Since the same rooms may be sold under different rate plans, as a system may carry a discrete inventory, or an inventory count in association with different rates. The superset of inventory may be greater than the physical count, with the actual number of rooms counted down when they are sold.

The Inventory Count Notification message can be used to communicate to revenue management systems how many rooms are available to sell during a specific period. A reservation system may choose not to synchronize with actual inventory numbers, rather with a threshold. Properties and booking sources need to agree on common thresholds, whether they are derived from virtual or real inventory, as well as a way to accommodate overbooking.

This Notification message allows for communicating both base and off-sell inventory. The base inventory message accommodates changes in the base inventory levels, such as adding a new wing of the hotel. The off-sell inventory message sends a count of the inventory that is not available for sale. The off-sell messages indicating whether that inventory is temporarily out of order or has been taken off the market, as well as whether the inventory count is an adjustment to a current off-sell value, or a replacement of a previously determined amount.

3.13. OTA_HotelSummaryNotif RQ/RS

The Hotel Summary Notification message notifies a booking source of the general availability status of the hotel; indicating whether it is Open, Closed, or OnRequest, which means that a hotel is available to take reservations but is limited by restrictions. This notification can be used to update the status of the hotel and may be coupled with other notifications, such as the Booking Rule, Availability, or Rate Amount notifications to convey the general availability, rates, and restrictions in effect at a given time.

The availability status of a hotel may be affected by Yield Management System calculations. On a historical basis, a certain period of time may support higher rates or greater occupancy and thus limit the general availability of the hotel.

Rate hurdles establish an open/closed situation based upon the number of units available. If a hotel is open, the Hotel Summary Notification message communicates the minimum and maximum rate at which bookings can be made. As the rates and availability of a hotel property change, status messages are sent frequently (often daily) to reservation sources to notify them of the availability of the hotel for booking purposes.

During a particularly busy time, a hotel may be partially booked with only a few rate plans or room types remaining available. When a travel agent contacts that hotel to book a reservation for the guest, a message may be returned indicating that the hotel is "On Request". This means that the property has some availability and the requesting system needs to make another request using a Hotel Availability Request to determine the specific availability. A return of "On Request" indicates that a hotel is not closed, but is sufficiently full that a booking request may fail depending upon what is requested.

3.14. OTA_HotelRateAmountNotif RQ/RS

The Hotel RateAmount Notification message notifies a booking source of changes in the rates charged for room and non-room products of a hotel.

The creation of a new rate plan is done through the Rate Plan Notification message. When the rate amount of an active (bookable) rate plan changes, an update is made through the Rate Amount Notification. The Status Application Control is used to identify the inventory item (or inventory block), and the rate plan that the change in rate amount applies to.

The Hotel Rate Amount Message defines the amount of the base rate, as well as the maximum number of adults permitted in a room at the rate, along with the charges for additional adults and children. Tax amounts that apply to the rate are also communicated, indicating the type of tax, and how it is calculated, whether a flat amount or percentage. In short, the Rate Amount Notification should convey all of the information needed by a reservation system to book a hotel room (or non-room product) at the newly-established rate amount.

Using the Status Application Control, rate changes can be made based on dates, days of week, rate plan codes and/or inventory and inventory block codes. The following are examples of different types of rate amount changes that could be applied through this message:

- *Dates* - the rate changes from $89.00 per night to $99.00 per night from May 21st through July 31st for double bed rooms and king bed rooms (inventory code).
- *Days of Week* - The rate for all rooms on this property change from $69.00 per night to $59.00 per night on Fridays and Saturdays.
- *RatePlan Codes* - AAA and AARP rates are increased from $79.00 to $89.00 per night.
- *Inventory Codes* (Room product) - Suites and apartment room rates are increased by 10% (using inventory codes that define these inventory types).
- *Inventory Code* (Non-room product) - Rates for ballrooms and meeting rooms are increased from May 1st through July 1st.
- *Inventory Block Code* - The room rate for a convention group (identified by inventory block code) is $95.00 per night.
- *Additional occupancy* - Rates are $ 9.00 per night for additional adults. Rates for additional children are $5.00 per night.

When a rate amount is changed, the new rate amount must be populated up through the distribution system. The Viewership element defines the authorized distribution channel for the inventory, and the profile of the authorized booker for the inventory. Viewership is generally set up when a new rate plan code is negotiated. The authorized distribution channels are determined by the collection of destination codes in the Status Application Control.

3.15. OTA_HotelInvNotif RQ/RS

The Hotel Inventory Notification message is the message that sends the notification of the creation of a new inventory item, such as a room type or service type that did not previously exist at a hotel property. When the data base of a reservation system or booking source is populated for the first time, the hotel inventory notification message would be used to send descriptions of the inventory in the hotel, both room and non-room products.

A Hotel Inventory Notification establishes the existence of inventory codes in the receiving system. As the exchange of inventory information is not always a simple process, as the sending system and the receiving system may assign different codes to the same inventory item, requiring the use of a translation table to identify the inventory item in one system with the same item in another system.

For that reason, the Hotel Inventory Notification message should precede the Inventory Count Notification and Rate Plan Notification messages. The Inventory Count Notification establishes the physical inventory count by inventory code, and a Rate Plan Notification assigns a rate plan to the inventory item.

While the Hotel Inventory Notification message provides the building block that populates or initializes the hotel for any reservation system to establish the number of rooms, etc., that can be sold, inventory restrictions that are associated with a rate can be set on the rate itself. Restrictions associated with a rate are sent using the Hotel Booking Rule Notification.

Individual notification messages may be sent as separate transmissions or combined together within a MIME multipart envelope as each notification contains a Hotel Reference that identifies the hotel property.

When a hotel has been in operation for a period of time, the rooms, services and amenities that are part of inventory may change or be discontinued. The Inventory Notification allows for the update of an active inventory item, or the deletion of an inventory item altogether, indicating the current status of the inventory.

The response message returned for a new inventory item differs from other Availability, Rate and Inventory notification messages in that the receiving system may return the inventory code(s) assigned by that system that cross-reference with the codes received along with the confirmation that the message was processed successfully.

3.16. OTA_HotelRatePlanNotif RQ/RS

The Hotel Rate Plan Notification message is used to notify a booking source of a new rate plan created for a hotel, or to modify and synchronize existing rate plans between systems.

When a hotel creates a new rate, whether that hotel is new or has been in operation for some period of time, the synchronization of rate plans can be a complicated process. A translation table may be required to identify the rate plan in one system with the same rate plan that is stored in another system. The Hotel Rate Plan Notification message is sent to a booking agent, indicating whether this is 1) the initial announcement of a new rate plan, 2) an update of an active (bookable) rate plan, or 3) a notification that a rate plan is no longer in effect and should be deactivated in their system.

With the creation of a new rate plan, a business process must also take place to ensure that the rate plan is populated up through the distribution system. New rate plans and group blocks are broadcast through authorized channels of distribution determined by negotiated business agreements.

Viewership is usually set up when a new rate plan code is negotiated and it defines the distribution channel for the rate plan, and the profile of the authorized booker(s). The distribution channels are indicated by a collection of System Codes.

When a hotel system sends out a status message to notify systems of the availability of a hotel, the StatusApplicationControl uses the rate plan codes that have been established by the Hotel Rate Plan Notification to determine which rate plans are available. The RatePlanCodeType indicates whether the rate plan(s) available are a single rate plan, or a grouping of rate plans.

The RatePlan Shoulders, Sellable Products and Viewerships contain a Reference Place Holder (RPH) element that can be used for indexing to identify a specific rate plan among a group of items of the same name.

The `<OTA_HotelRatePlanNotifRS>` returns a response to the Hotel Rate Plan Notification request message, indicating that the notification message was successfully processed, Warnings from business processing rules or Errors if the notification was not able to be processed.

Additionally, the response message may return the RatePlanCode(s) and /or Rate Plan Grouping Codes assigned to the rate plan by the receiving system in response to a new rate plan notification. These values would only be returned when the notification is of *RatePlanCodeType*= New and the sender is translating rate plan codes. If this is the case, the values sent in the RatePlanCode or RatePlanGroupingCode attributes could be empty, and in subsequent transactions for the inventory item, the sender would be able to populate the rate plan code with the value returned by the receiver.

3.17. OTA_HotelInvBlockNotif RQ/RS

The Inventory Block Notification message is used to notify a booking authority of the creation of a group block that can be sold against inventory, and to subsequently modify or synchronize an existing inventory block between systems.

In order to accommodate reservations for a group of guests in one party, a hotel may assign an inventory block and notify the Central Reservation Systems of the code and the allotment that can be used. Travel agents that are authorized to book against the allotment may then contact the hotel or Central Reservations Office to pick up a reservation within the block of rooms.

Viewership of the inventory block is also a negotiated item. Some blocks may be created with agents having only a read-only capability because reservations for the block must be made through a single convention bureau, or market segment. In this case, certain rates are packaged together and typically booked by a group of agents. Viewership defines the distribution channels for the block by using the profiles of the authorized booking agents, and assigning distribution channels through the collection of System Codes.

The Hotel Rate Plan Notification and the Hotel Inventory Block Notification messages can be combined to create a group block specifying inventory types, and rate plans, indicating the date range that the group block can be booked, including shoulder periods on either side of the stay dates. The Hotel Rate Amount Notification can be used to indicate the amount charged for the group plan, and any booking restrictions can be sent via the Hotel Booking Rule Notification if needed.

Thus, the Hotel Inventory Block Notification creates the foundation for communicating the rate and inventory of a block, as well as the rules associated with creation of the block. This message includes rates, room types, and hard rules that apply to the booking block, e.g.: 3-night stay required, etc. Although the Hotel Inventory Block Notification is a message that establishes the foundation for a block of inventory, it does not assume any booking activity.

Once the selling process is underway, the synchronization of inventory blocks can be a complicated process. A translation table may be needed to identify an inventory block in one system with the same inventory block that is stored in another system. The Hotel Inventory Block Notification message tells a booking agent whether this is an initial announcement of a new Inventory Block, an update of an active (bookable) block, or a notification of a block that is no longer in effect and should be deactivated in their system. The Booking Limit Status Message, a part of the Hotel Availability Notification, can be used to set new limits and report the utilization of the block in order to pass information, such as the Guest Count, and to synchronize the information on both sides of the interface.

When a hotel system sends out a status message to notify systems of the availability of a hotel, the Status Application Control is uses the Inventory Block codes to determine the status of availability for the block. The InventoryBlockCodeType indicates whether the inventory block(s) available are a single Inventory Block code, or a grouping of Inventory Block codes.

The RatePlan Shoulders, Sellable Products and Viewerships contain a Reference Place Holder element (RPH) that can be used for indexing to identify a specific Inventory Block in a collection.

The `<OTA_HotelInvBlockNotifRS>` returns a response to the Hotel Inventory Block Notification, indicating that the message was successfully processed, Warnings from business processing rules, or Errors if the notification was not able to be processed.

Additionally, the response message may return the InvBlockCode and /or the InvBlockGrouping Code(s) assigned by the receiving system for the inventory block in response to a new inventory block notification. These values would only be returned when the notification is of *InvBlockCodeType*= New and the sender is translating the inventory block code values. In this case, the InvBlockCode attribute would be empty and in subsequent transactions for the Inventory Block, the sender would populate the InvBlockCode attribute with the values returned by the receiver.

3.18. OTA_HotelDescriptiveContentNotif RQ/RS

The Hotel Descriptive Content Notification is a broadcast message used to publicize detailed descriptive information about a hotel property by standardized data categories. Likewise, static information about a hotel property can be obtained by using the Hotel Search Request and/or Hotel Availability Request to search for static information by category, using codes agreed upon between trading partners to request more detail about a hotel.

The Hotel Descriptive Content interface enables accessing hotel data in both a push and pull format in order to avoid storing the data at multiple locations. In most cases, the hotel property is the owner of the data and is in charge of updating it, and sends out a broadcast message as a full overlay replacing previous information or a partial update message modification to make changes or portions of the data, using the `<OTA_HotelDescriptiveContentNotifRQ>`.

When a new hotel opens for business, the complete descriptive information used to advertise and sell the hotel's property and services is broadcast in a standardized format to the negotiated distribution list. In this initial broadcast of property information, the sending system will be pushing out an enormous quantity of information. The PMS and remote systems must be able to buffer messages during any downtime. It is presumed that the system would continue to republish subsequent updates as necessary if a subscriber is unable to be contacted.

In the hotel environment, when a guest wishes to book a hotel, two basic search criteria often include the location of the hotel, and the price of the rooms. Beyond this, many factors can influence the guest's ultimate choice when booking a reservation. To assist the guest in making their choice, a booking agent looks further for descriptive information about a hotel, such as describing recreational or business services, or the hotel facilities or amenities. In many cases, the description of hotel static information may be more valuable than a percentage or weighting number given by the querying system in response to the hotel search. The Hotel Descriptive Content Specification defines the categories and fields that will allow the agent to search by code to answer the myriad of specific needs of the guest.

The descriptive content data is structured by categories of text data, and enables a query using a category code -either published by the OpenTravel Alliance or as agreed upon between trading partners. The transaction for pulling hotel data in granular sections using the Hotel Search Request `<OTA_HotelSearchRQ>` is the Search Criterion *Type*="CodeRef". When performing an availability query using the message, `<OTA_HotelAvailRQ>`, the element `<SearchCodes>` can include multiple `<CodeRef>` elements to obtain detailed information. The data returned is determined by the category code sent in the request. A detailed query response may return a collection of descriptive content for each category.

Package Tours/Holiday Bookings

A **package holiday** usually consists of a single "pre-defined" offering with or without a choice of basic elements such as transport and accommodation. The business model for this concept is that allocated blocks of transport and accommodation inventory for a 'season' or 'brochure period, typically 'Summer' (May to October) and 'Winter' (November to April) are reserved by a tour operator from the supplier. These are combined into package holiday inventory items, and set up and sold from the tour operator's system. Notification to the original supplier of the take-up of individual inventory items takes place a short period before departure of the customers. The use cases covered in this document relate to the selling by the tour operator of the packages from their internal inventory stock.

A booking can contain any number of itinerary elements, such as transport, accommodation, car rental, extra products or services, special services, extras etc. Itinerary or journey elements are distinct by type of service and product, place of delivery, date and time the service is offered and can be individually assigned to one or more of the customers involved in the booking.

The parties involved in the current business interactions comprise Travel Agents (on behalf of customers) making enquiries and bookings with the Tour Operators who publish brochures describing the package tours on offer. The normal interaction medium is videotex which, due to the limited screen display size (80 characters x 25 lines), requires a considerable number of message pairs to achieve a booking. However, it is well-established and extensively used, with some operators taking the majority of their bookings this way.

This document covers two scenarios – Package Availability and Package Booking. The Availability phase checks a selected package against the supplier's system and provides full details and costings and the Booking phase completes the cycle by committing the customer to paying for the holiday and the supplier to providing it. Each scenario can be invoked independently of the others, subject to the necessary minimum information being supplied in the request message.

Package Availability comprises the following messages :.	
Package Availability Request. Package Availability Response	OTA_PkgAvailRQ OTA_PkgAvailRS
Package Booking comprises the following messages :	
Package Booking Request. Package Booking Response	OTA_PkgBookRQ OTA_PkgBookRS

4.1. OTA_PkgAvail RQ/RS

The Package Availability Request message is designed to establish whether a specific package is available for a specific date and duration for a given number of customers (who may be subdivided by category e.g. Adult, Child etc.).

If the request is satisfied, the enquirer will be provided with a priced breakdown of the package elements.

If the request is not satisfied because one or more elements of the package are not available, the enquirer may be provided with a selection of alternatives for that element.

Package Availability Use Case
The business use case that supports this message identifies a customer or agent (person or system acting on behalf of the customer) who requests the availability status of a specific occurrence of a package. The first step in this use case is for the enquirer to supply the details of the package, the stay and the party composition.

The steps of the use case proceed as follows:

- The Customer or agent requests the availability of a specific package for a date and duration for a number of passengers.
- The system returns a priced package summary detailing all possible combinations of facilities (where appropriate).

The data returned at Step 2 is used as the basis for the Package Booking Request.

Additional data that accompanies the response message may include information which may affect the enquirer's decision on whether to book the package, e.g. building works, unavailable facilities etc.

Where the supplier system is unable to provide costs for all combinations, it may return a basic priced summary with details of the availability of facilities from which the customer must make a choice and submit a revised request in order to get a full costing.

Possible business processing errors include:

- One or more components of the package cannot satisfy the number of passengers for the date and duration requested. The system may return a list of possible alternative components and if the enquirer chooses one from the list as a substitute the use case will restart from step 1.

Scenario

A customer wants to know if the package consisting of the Hotel Miramar in Alcudia Majorca travelling on a specific return flight pair between London Gatwick and Palma is available for 2 adults and 2 children for 14 nights from 02 October 2001. The supplier system responds with information of the flight, the hotel and prices for single, twin, triple bedded rooms for variable valid occupancies which could be generated by 2 adults and 2 children (e.g. one twin with two extra beds or a single for 1 adult with a triple for 1 adult and two children etc).

4.2. OTA_PkgBook RQ/RS

The Create Booking messages are designed to make a confirmed booking of a package holiday whose availability may or may not have been checked. An <ActionType> qualifier is available to modify the default 'Book' request to simply return a Quotation or make a provisional reservation pending authorisation of payment details.

If the 'Book' action request is satisfied, the enquirer will be requested to provide contact and payment details. On authorisation of the payment details the enquirer will be provided with a Booking Reference (and, optionally, Invoice details for printing).

Create Booking Use Case
The business use case that supports this message identifies a customer or agent (person or system acting on behalf of the customer) who requires to book a specific occurrence of a package. The first step in this use case is for the traveller or requesting party to supply the package and party details.

The steps of the use case proceed as follows:

1. The Customer or agent requests the creation of a booking for a specific package for a date and duration for a number of passengers, together with contact details.
2. The system reserves the necessary capacity and confirms the details of the booking including costs.
3. When necessary the customer or agent provides payment details and the supplier obtains payment authorisation.
4. The supplier creates a booking entity and provides the customer or agent with the Booking Reference and optionally the data to produce a written confirmation.

Possible business processing errors include:

- One or more elements of the package cannot satisfy the number of passengers for the date and duration requested in which circumstance the use case will revert to the Package Availability response message as described in the Package Availability scenario in section 1 of this document.
- Payment authorisation is refused.

Scenario
A customer wishes to book the package consisting of the Hotel Miramar in Alcudia Majorca travelling on a specific return flight pair between London Gatwick and Palma for 2 adults and 2 children and one infant for 14 nights from 02 October 2001.

Golf Tee Times

The OTA Golf Tee Times provides three separate request/response pairs of messages to support the functionality of requesting data from another system in the process of finding a golf course, inquiring as to availability, and booking a tee time. All message sets assumes a pull model, where the originating system requests a specific set of data (as agreed by trading partners).

A system through which an interested party initiates a booking process will request a list of courses that meet the specified qualifiers using the OTA_CourseSearchRQ message. In this message, the desired criteria date is identified. The receiving system (typically a Golf Course Tee Sheet System or a consolidator's system) responds with the OTA_CourseSearchRS message, which includes either summary or detailed information about the courses that meet the requested criteria. Where the flag DetailResponse is set to "Yes", all traits of the course(s) meeting the criteria are returned. Where the flag is set to "No", only those traits matching the requested criteria and the basic course information are returned. All messages assume the no-state, meaning that the querying system will initiate the transaction and expect a response from the queried system. All message responses include the request identification. Responses may be returned in any order.

5.1. OTA_GolfCourseSearch RQ/RS

OTA_CourseSearchRQ – Sends a request for course information to another system. All the elements and attributes are optional, unless otherwise stated as required. The requesting system may request a detailed or summary response.

OTA_CourseSearchRS - Returns a set of data representing the course(s) that meet the requested criteria. Where the criteria attribute of Required is "Yes" then only those courses that meet those criteria will be returned. Where the Required attribute is "No" then a course that does not meet that criteria may be included in the set. In all cases, where the criteria has been included in the request, the comparable trait and its value will be returned, along with the basic course information and identification. The message may also include Warnings from business processing rules or Errors if the request did not succeed.

5.2. OTA_GolfCourseAvail RQ/RS

OTA_CourseAvailRQ – Sends a request for course availability to another system. All the elements and attributes are optional, unless otherwise stated as required.

OTA_CourseAvailRS - Returns the requested set of data if the request can be processed, or includes Warnings from business processing rules or Errors if the request did not succeed.

5.3. OTA_GolfCourseRes RQ/RS

OTA_CourseResRQ – Sends a request for a reservation to another system. All the elements and attributes are optional, unless otherwise stated as required.

OTA_CourseResRS - Returns the requested reservation if the request can be processed, or includes Warnings from business processing rules or Errors if the request did not succeed.

Insurance

Travel insurance exists to protect the traveler and the traveler's investments in the journey. Travelers usually find four reasons to invest in travel insurance.

- Travel medical insurance protects the travelers' health and safety while traveling outside of their primary medical insurance coverage area. Travel medical insurance often covers the costs of medical treatment and hospitalization in the event of an accident or illness and may provide monetary compensation to a beneficiary in the unfortunate event of the insured's death.
- Travel protection insurance protects the travelers' travel investment (money, time) in the journey. Travel protection insurance usually covers the costs of the traveler's journey and/or belongings under certain coverage situations.
- Emergency evacuation insurance helps insure the travelers' safety by transporting them out of a dangerous or medically ill-equipped region.
- Travel assistance services provide travelers with aid and resources that they might not normally have access to on their journey. Such resources may include translation services, legal services, and communication services.

Insurance plans are usually pre-set packages of benefits that may include one or more of the above types of insurance. Plan benefits and costs are pre-determined by the plan's underwriters and are usually based on traveler age, trip cost, and specific journey elements (cost, destination, etc). Depending on the plan, coverage may be purchased for the duration of a single trip or may cover multiple trips within a specified period of time.

Customers can search for and book insurance through the OTA specification. The OTA specifications dedicate a schema for travel insurance quoting and booking.

The XML Schema file contains the structure and contents of four separate messages for travel insurance:

- Quote request
- Quote response
- Booking request
- Booking response

The Insurance schema makes full use of objects in the travel profile specifications defined earlier by OTA, to maximize interoperability with those specifications. A description of these shared elements has been left out of this section, but may be found in the OTA Insurance schema. The use of data from customer profiles assumes that the customer has given permission to extract data from those files and share the data with insurance vendors.

6.1. OTA_InsuranceQuote RQ/RS

Unlike other travel services offered by traditional suppliers of travel products (hotels, airlines, etc.), insurance availability is not affected by a limited, or finite inventory. Instead, availability is determined by qualification factors (age of travelers, cost of trip, destination, etc.). An insurance availability search is equivalent to a request to an insurance vendor to provide a price for insurance services. The quote response returns pricing information for specific insurance plans carried by the vendor that meet the customer's requirements.

The insurance quote response returns to the requestor a price quotation, as well as details about the insurance company providing the quote, contact people/numbers if the requestor needs more information, any restrictions on the policy, and booking details.

6.2. OTA_InsuranceBook RQ/RS

The insurance book request message resembles the insurance quote request in structure and contents. The insurance book request is contained within the <OTA_InsuranceBookRQ> root element and contains one or more <PlanForBookRQ> elements.

The insurance book response returns to the requestor the details about the insurance plan(s) booked as well as confirms the information that was sent with the insurance book request message.