



HTNG Product Distribution Groups Specification Version 2.1

31 October 2014

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Hotel Technology Next Generation (HTNG) is a non-profit association with a mission to foster, through collaboration and partnership, the development of next-generation systems and solutions that will enable hoteliers and their technology vendors to do business globally in the 21st century; to be recognized as a leading voice of the global hotel community, articulating the technology requirements of hotel companies of all sizes to the vendor community; and to facilitate the development of technology models for hospitality that will foster innovation, improve the guest experience, increase the effectiveness and efficiency of hotels, and create a healthy ecosystem of technology suppliers.

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Table of contents

VERSION 2.1	1
31 OCTOBER 2014	1
1 THIS SPECIFICATION AT A GLANCE.....	5
2 DOCUMENT INFORMATION	6
2.1 DOCUMENT HISTORY	6
2.2 DOCUMENT PURPOSE	7
2.3 SCOPE	7
2.4 RELATIONSHIP TO OTHER STANDARDS.....	7
2.5 USEFUL RESOURCES.....	7
2.6 AUDIENCE.....	8
2.7 OVERVIEW	8
2.8 FURTHER CONSIDERATIONS.....	8
3 COMPONENT SCENARIOS.....	9
3.1 UPDATE GROUP BLOCK	10
3.1.1 <i>Overview</i>	10
3.1.2 <i>Roles</i>	11
3.1.3 <i>Use Case</i>	11
3.1.4 <i>Message Flows</i>	12
3.1.5 <i>Create Block</i>	12
3.1.6 <i>Update Block</i>	15
3.1.7 <i>Cancel Block</i>	17
3.2 UPDATE GROUP INVENTORY	17
3.2.1 <i>Overview</i>	17
3.2.2 <i>Roles</i>	17
3.2.3 <i>Use Case</i>	18
3.2.4 <i>Message Flows</i>	19
3.2.5 <i>Sample Scenario</i>	19
3.3 UPDATE GROUP RATES	20
3.3.1 <i>Overview</i>	20
3.3.2 <i>Roles</i>	20
3.3.3 <i>Use Case</i>	21
3.3.4 <i>Message Flows</i>	22
3.3.5 <i>Sample Scenario</i>	22
3.4 GET GROUP INVENTORY	24
3.4.1 <i>Overview</i>	24
3.4.2 <i>Roles</i>	24
3.4.3 <i>Use Case</i>	24
3.4.4 <i>Message Flows</i>	25

3.4.5	<i>Sample Request</i>	25
3.4.6	<i>Sample Response</i>	25
3.5	GET GROUP RATES	26
3.5.1	<i>Overview</i>	26
3.5.2	<i>Roles</i>	26
3.5.3	<i>Use Case</i>	26
3.5.4	<i>Message Flows</i>	27
3.5.5	<i>Sample Request</i>	27
3.5.6	<i>Sample Response</i>	27
4	MESSAGES	29
4.1	CREATE OR UPDATE BLOCK.....	29
4.1.1	<i>Data Element Table – Create or Update Group Block Request</i>	29
4.1.2	<i>Data Element Table – Create or Update Group Block Response</i>	36
5	APPENDICES	38
5.1	GLOSSARY OF TERMS.....	38
5.2	IMPLEMENTATION NOTES.....	38
5.2.1	<i>Errors and Warnings</i>	38
5.3	REFERENCED DOCUMENTS	38

1 This Specification at a Glance

This specification details a set of core services and a schema to be used in the exchange of Group information between systems. This document is an extension of the Rates and Availability specifications, focusing on groups-specific messages.

The Groups use cases covered in this document include the following:

- Update Group Block
 - Create Block
 - Update Block
- Update Group Inventory
- Update Group Rates
- Get Group Inventory
- Get Group Rates

2 Document Information

2.1 Document History

Version	Date	Author	Comments
1.0	Apr 2008	Product Distribution (PD) Workgroup	First version of the spec
1.1	Sep 2009	PD Workgroup	Added Inventory Block
1.2	22 Oct 2010	PD Workgroup	Added OTA_HotelInvBlockNotifRQ/InvBlocks/InvBlock/BlockDescriptions/BlockDescription/Text
1.2.01	11 Jun 2013	Kylene Reese	Moved existing Groups spec content into standalone document; added groups information from Availability and Rates specs
1.2.02	28 Jun 2013	Jay Rosamilia	Made a few minor changes
1.2.03	08 Jul 2013	PD Workgroup	Reviewed introductory information and updated Update Group Block scenario
1.2.04	15 Jul 2013	PD Workgroup	Updated Create Block sub-scenario
1.2.05	29 July 2013	PD Workgroup	Updated Update Group Block sub-scenarios
1.2.06	12 Aug 2013	PD Workgroup	Updated Update and Get scenarios
1.2.07	13 Aug 2013	Kylene Reese	Continued to break out the scenarios
1.2.08	19 Aug 2013	PD Workgroup	Continued scenario work
1.2.09 – 1.2.12	26 Aug – 09 Sep 2013	PD Workgroup	Updated all Get scenarios; removed Get Group Block scenario
1.2.13	16 Sep 2013	PD Workgroup	Finalized spec and removed Get Group Block data element table since no workgroup member has made us aware that they are using it
1.90	19 Sep 2013	Kylene Reese	Prepared document for member review
1.91	14 Oct 2013	Jay Rosamilia	Added Cancel scenario
1.99	14 Oct 2013	Kylene Reese	Prepared document for workgroup vote
2.0	21 Oct 2013	PD Workgroup	Prepared document for General Release
2.0.01 – .04	Apr 2014	PD Workgroup	Addition of MarketCode, Sourceof Business, POS node and RoomTypePickUpStatus

2.2 Document Purpose

This document defines the Hotel Technology Next Generation (HTNG) scenarios and business processes for exchanging group block notification messages based on OpenTravel Alliance messages. This document provides a framework for trading partners to define various attributes related to groups to be exchanged between systems.

2.3 Scope

This document defines a common HTNG implementation of the OpenTravel Alliance specifications for group messages. This document outlines groups-specific scenarios and messages and is an extension of the Product Distribution Rates and Availability specifications. As the scope of this specification pertains to only groups, see the links to the related specs below for more detailed information.

2.4 Relationship to Other Standards

This specification and its supporting schemas leverage the existing OpenTravel Alliance methodology for message construction and draws upon data definitions common to several HTNG specifications as of October 2013.

Related specifications as of October 2013:

- Other HTNG Product Distribution specifications – outline of most recent versions available on [workgroup's wiki page](#)
- [OpenTravel Alliance Specifications](#)

2.5 Useful Resources

- [Implementing Web Services Using HTNG Specifications – A Quick Start Guide for Software Developers](#)
- HTNG Discussion Board – currently available at <http://www2.htng.org/discussion>
- [Error Handling Appendix](#) – This is a companion document containing mandatory and optional error codes. This document is relevant when referring to warnings or errors, which are reported in message responses.

2.6 Audience

This document is designed as a guide for project managers, programmers and analysts to gain detailed information needed to implement the distribution of group information between systems.

2.7 Overview

The OpenTravel Alliance messages contain a large number of optional fields, and the same information can be represented in a number of different ways.

The intent of the specification is to recommend a minimum common standard to represent complex data. The intent is also to avoid having to pass the same information in more than one field, thus avoiding confusion.

Trading partners may agree prior to implementation to use additional fields for data not covered in the scenario, including TPA extensions as per the OpenTravel Alliance schemas.

2.8 Further Considerations

The scenarios outlined provide a common starting point for the definition of the messages exchanged and that the implementers of these messages will:

1. Add expansions as needed to enable exchange of additional information while retaining compliance with the OpenTravel Alliance specifications.
2. Report expansions deemed common to HTNG for consideration as additional scenarios.
3. Report any missing elements or attributes to OpenTravel Alliance for inclusion in a future specification release.

3 Component Scenarios

Partners will be responsible for creating their own Quality Assurance Test Scripts.

The intent of the HTNG scenarios is to recommend a minimum common denominator and clarify what fields should be used to transfer the data required. The main aim is to avoid having to pass the same information in more than one field, thus avoiding confusion.

Trading partners may agree prior to implementation to use additional fields for data not covered in the scenario, including TPA extensions as per the OpenTravel Alliance specifications schema.

Behavior

The process being facilitated is that of requesting group inventory/block information between systems [generally, but not exclusively, a Property Management System (PMS) and a Central Reservation System (CRS)].

Based on the type of information that needs to be exchanged, trading partners will select the appropriate scenario and fill in the Extensible Markup Language (XML) according to the guidelines provided in the specific scenario.

XML will then be sent to the appropriate webservice, and the correct response will be used for the selected profile. To facilitate the ease of troubleshooting, it is highly recommended that both the sending and receiving systems log communications.

Behavior Expected Prior to Transmission

The behavior expected from a sending system will be:

- Usage of the appropriate profile for the type of information to be sent
- Translation of rate information into codes understood by the receiving system (if required)
- Provision of all fields classified as Mandatory in the profile
- Validation of XML message format
- Transmission of the XML to appropriate URL set up by the receiving system using the appropriate identification criteria (SOAP username and password provided by the receiving system)

Behavior Expected from Receiving System

Upon receipt of the XML message the behavior expected from the receiving system will:

- Process XML received by the sending system
- Update of hotel data with rate information contained in the XML sent by the sending system

- If update is not possible: create an error response as defined in the profile and transmit the response to the sending system
- Acknowledge successful/unsuccessful processing of the upload using the appropriate response message

Behavior Expected Upon Processing by Receiving System

Once the initial request has been processed by the receiving system, the sending system will need to:

- Be able to evaluate error responses coming from the receiving system
- React to error responses as needed by modifying the XML and/or ensuring correct mapping tables are used

3.1 Update Group Block

3.1.1 Overview

This process describes the interaction between systems where notification of changes to group blocks must be communicated.

The Hotel Inventory Block message pair provides the ability for a booking source to request group inventory block status and rate information from a specified hotel property. The request message allows the booking source to resynchronize group block and rates information due to a system outage.

The Hotel Inventory Block request message allows a booking source to filter another system for detailed information regarding group inventory. The request message is limited to an individual property for a specified date range and group code identifier. The message can also be filtered by rate plan(s), room type(s) and other group related information.

Based on the criteria specified in the request message, the response message contains the set of inventory controls for the group specified. The Hotel Inventory Block response message is similar to the Hotel Inventory Block Notif request message in that it contains a complex set of controls/rules surrounding the group.

The OTA_HotelInvBlockNotifRQ message is also used for updates to a block and would create a full overlay. If just a rate is changing, the implementing partners may use the HotelRatePlanNotifRQ/RS instead of using this full message. Run of House rooms will be sent as a room type.

3.1.2 Roles

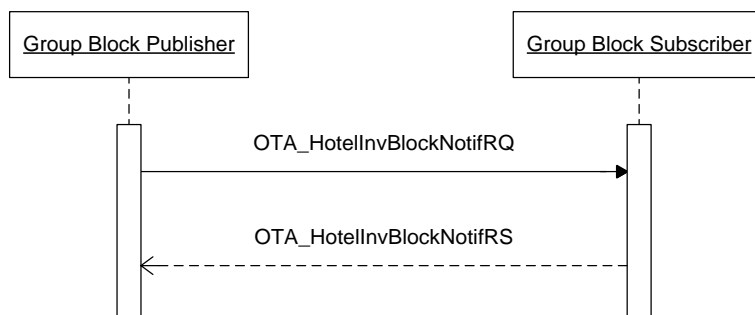
Role Name	Definition	Examples
Group Block Publisher	A system that maintains group block data and notifies Group Block Subscriber(s) of changes.	<ul style="list-style-type: none">• Group Management System• Central Reservation System• Property Management System• Revenue Management System
Group Block Subscriber	A system that requires notification of group block data from Publisher system.	<ul style="list-style-type: none">• Group Management System• Channel Management System• Online Travel Agent• Central Reservation System• Property Management System• Revenue Management System

3.1.3 Use Case

Assumptions:	<ul style="list-style-type: none">• Publisher and Subscriber have agreed which attributes will be transmitted and accepted.• Publisher and Subscriber have agreed upon a notification model (either real-time or timed interval).
Pre-condition:	None
Trigger:	A change to group block data occurs in the Group Block Publisher System.
Basic Course of Events:	<ol style="list-style-type: none">1. Group Block Publisher constructs OTA_HotelInvBlockNotifRQ containing the group block data.2. Group Block Publisher successfully transmits message payload.3. Group Block Subscriber receives the message payload.4. Group Block Subscriber processes the OTA_HotelInvBlockNotifRQ.5. Group Block Subscriber acknowledges with the OTA_HotelInvBlockNotifRS indicating processing status of the message (including any relevant warnings).6. Group Block Publisher may update their database to log what was last successfully processed by the Subscriber.
Post-condition:	Group Block Subscriber may update their log with what was last successfully processed.

Exception Path 1:	<ol style="list-style-type: none"> 1. At step 3, the Group Block Subscriber does not successfully receive the message. 2. Group Block Subscriber does not return the OTA_HotellnvBlockNotifRS. 3. Group Block Publisher may: <ol style="list-style-type: none"> a. Log the unsuccessful send. b. Resend the update notification immediately. c. Re-queue the update notification. d. Wait until the next agreed interval to send an update notification.
Exception Path 2:	<ol style="list-style-type: none"> 1. At Step 4, the Group Block Subscriber does not successfully process the message. 2. Group Block Subscriber returns OTA_HotellnvBlockNotifRS with the appropriate error indicator. 3. Group Block Publisher may: <ol style="list-style-type: none"> a. Log the response error. b. Take action to correct the error and/or resend the transaction if necessary. c. Re-queue the update notification. d. Wait until the next agreed interval to send an update notification.
Alternative Paths:	None

3.1.4 Message Flows



3.1.5 Create Block

This message defines the process between publisher and subscriber when information about a group must be communicated. This may include the establishment of an initial block or the maintaining of an existing block.

3.1.5.1 Sample Scenario

Publisher sends Subscriber the details on a new group block.

Hotel Code:	HXCAIZZ
Group Code:	XMAS13
Group Long Name:	Xmas Group 13
Action:	Book
Status:	Definite
Booking Restrictions:	Hotel Only
Start Date:	Dec 20th 2013
End Date:	Dec 30th 2013
Cut off Date:	Dec 1st 2013
Room Type:	C2T
Rooms Allocated:	25
Complimentary Rooms:	1
Selling Limit:	30
Rate Plan Code:	G1
Rate Amount:	\$100.00
Tax Amount:	5%
Additional Guest Amount:	None
Bill to Master:	Room and Tax
Reservation Method:	Rooming List
Food & Beverage Bill:	Individual
Organizer's Name:	Patty Lander
Organizer's Company:	PartyLand Company
Organizer's Street:	LyonerStrasse 40
Organizer's City:	Frankfurt
Organizer's State:	Germany
Organizer's Phone:	49 69 664 65100
Organizer's email:	partyland@parties.com
Organizer's fax:	49 69 664 65101

3.1.5.1.1 Sample Request

```
<OTA_HotelInvBlockNotifRQ xmlns="http://www.opentravel.org/OTA/2003/05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Version="1.001"
EchoToken="873298472379867896" TimeStamp="2013-11-17T09:30:47.0Z">
  <POS>
    <Source>
      <RequestorID Type="17" ID="GroupMgt" />
    </Source>
  </POS>
  <InvBlocks>
    <InvBlock InvBlockStatusCode="2" TransactionAction="Book" InvBlockCode="XMAS13"
InvBlockLongName="Xmas Group 13" RestrictedBookingCodeList="10">
      <HotelRef HotelCode="HXCAIZZ" />
      <InvBlockDates End="2013-12-30" AbsoluteCutoff="2013-08-13" Start="2013-12-
20" />
      <RoomTypes>
```

```

    <RoomType End="2013- 12- 30" RoomTypeCode="C2T" Start="2013- 12- 20">
      <RoomTypeAllocations>
        <RoomTypeAllocation End="2013- 12- 30" NumberOfUnits="25" Start="2013-
12- 20" CompRoomQuantity="1" SellLimit="30"/>
      </RoomTypeAllocations>
      <RatePlans>
        <RatePlan RatePlanCode="G1" NumberOfUnits="25" CurrencyCode="DE">
          <BaseByGuestAmts>
            <BaseByGuestAmt NumberOfGuests="1" AmountBeforeTax="100. 00"
AmountAfterTax="105. 00"/>
          </BaseByGuestAmts>
          <AdditionalGuestAmounts>
            <AdditionalGuestAmount AgeQualifyingCode="10"/>
          </AdditionalGuestAmounts>
          <MarketCode MarketCode="S" MarketCodeName"Social"
SourceOfBusiness="ABC"/>
        </RatePlan>
      </RatePlans>
    </RoomType>
  </RoomTypes>
  <BlockDescriptions>
    <BlockDescription>
      <Text>The is the block Description</Text>
    </BlockDescription>
  </BlockDescriptions>
  <MethodInfo BillingType="SignRoomAndTax" ReservationMethodCode="2"
SignFoodAndBev="false"/>
  <Contacts>
    <Contact ContactType="Organizer">
      <PersonName>
        <GivenName>Patty</GivenName>
        <Surname>Lander</Surname>
      </PersonName>
      <Telephone PhoneLocationType="8" FormattedInd="true" PhoneNumber="49 69
664 65100" PhoneTechType="1"/>
      <Telephone PhoneLocationType="8" FormattedInd="true" PhoneNumber="49 69
664 65101" PhoneTechType="3"/>
      <Address Type="0. AAA. X" ShareSynchInd="Yes" RPH="0" FormattedInd="false"
ShareMarketInd="Yes" DefaultInd="false" UseType="0. AAA. X">
        <Address Type="2">
          <AddressLine>Lyonerstrasse 40</AddressLine>
          <CityName>Frankfurt</CityName>
          <CountryName Code="DE">Germany</CountryName>
        </Address>
      </Address>
      <Email EmailType="2" DefaultInd="true">test@partyland. com</Email>
      <URL>http://www. partylandcompany. com</URL>
      <CompanyName CompanyShortName="PartyLand" Code="PLC"
CodeContext="IATA">PartyLand Company</CompanyName>
      <EmployeeInfo EmployeeLevel="String" EmployeeTitle="String"
EmployeeId="String" EmployeeStatus="0. AAA. X">String</EmployeeInfo>
    </Contact>
  </Contacts>
</InvBlock>
</InvBlocks>
</OTA_HotelInvBlockNotifRQ>

```

3.1.5.1.2 Sample Response

```

<OTA_HotelInvBlockNotifRS xmlns="http://www. opentravel. org/OTA/2003/05"
xmlns: xsi="http://www. w3. org/2001/XMLSchema-instance" Version="1. 001"
EchoToken="873298472379867896" TimeStamp="2013- 11- 17T09: 30: 47. 0Z">
  <Success/>
</OTA_HotelInvBlockNotifRS>

```

3.1.6 Update Block

This message defines the process between publisher and subscriber when an update to an existing block and group information must take place.

3.1.6.1 Sample Scenario

Group Block Publisher sends Group Block Subscriber the updated details on a group block. The subscriber sends a response message to the publisher with a success element and not warnings.

Hotel Code:	HXCAIZZ
Group Code:	XMAS13
Group Long Name:	Xmas Group 13
Action:	Book
Status:	Definite
Booking Restrictions:	Hotel Only
Start Date:	Dec 20 th 2013
End Date:	Dec 30 th 2013
Release Date:	Dec 1 st 2013
Room Type:	C2T
Rooms Picked-up:	10
Rooms Allocated:	25
Selling Limit:	30
Rate Plan Code:	G1
Mrkt	S
Source	ABC
Bill to Master:	Room and Tax
Reservation Method:	Rooming List
Food & Beverage Bill:	Individual
Organizer's Name:	Patty Lander
Organizer's Company:	PartyLand Company
Organizer's Street:	LyonerStrasse 40
Organizer's City:	Frankfurt
Organizer's State:	Germany
Organizer's Phone:	49 69 664 65100
Organizer's email:	partyland@parties.com
Organizer's fax:	49 69 664 65101

3.1.6.1.1 Sample Request

```

<OTA_HotelInvBlockNotiFRQ xmlns="http://www.opentravel.org/OTA/2003/05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Version="1.001"
EchoToken="873298472379867896" TimeStamp="2013-11-17T09:30:47.0Z">
  <POS>
    <Source>
      <RequestorID Type="17" ID="GroupMgt"/>
    </Source>
  </POS>
  <InvBlocks>
    <HotelRef HotelCode="HXCAIZZ"/>
    <InvBlock InvBlockStatusCode="2" TransactionAction="Modify" InvBlockCode="XMAS13"
InvBlockLongName="Xmas Group 13" RestrictedBookingCodeList="10">
      <!-- InvBlockStatusCode = 2 for Definite; RestrictedBookingCodeList = 10 for
Hotel -->
      <InvBlockDates Start="2013-12-20" End="2013-12-30" AbsoluteCutoff="2013-12-01"/>
      <RoomTypes>
        <RoomType RoomTypeCode="C2T">
          <RoomTypeAllocations RoomTypePickUpStatus="16">
            <RoomTypeAllocation NumberOfUnits="25" SellLimit="30"/>
          </RoomTypeAllocations>
          <RoomTypeAllocations RoomTypePickUpStatus="17">
            <RoomTypeAllocation Start="2013-12-20" End="2013-12-21"
NumberOfUnits="0"/>
            <RoomTypeAllocation Start="2013-12-22" End="2013-12-23"
NumberOfUnits="2"/>
            <RoomTypeAllocation Start="2013-12-25" End="2013-12-30"
NumberOfUnits="0"/>
          </RoomTypeAllocations>
          <RatePlans>
            <RatePlan RatePlanCode="G1">
              <MarketCode MarketCode="S" MarketCodeName="Social"
SourceOfBusiness="ABC"/>
            </RatePlan>
          </RatePlans>
        </RoomType>
      </RoomTypes>
      <MethodInfo BillingType="SignRoomAndTax" ReservationMethodCode="2"
SignFoodAndBev="false"/>
      <Contacts>
        <Contact ContactType="Organizer">
          <PersonName>
            <GivenName>Patty</GivenName>
            <Surname>Lander</Surname>
          </PersonName>
          <Telephone PhoneNumber="49 69 664 65100" PhoneTechType="1"/>
          <Telephone PhoneNumber="49 69 664 65101" PhoneTechType="3"/>
          <Address Type="2">
            <AddressLine>Lyonerstrasse 40</AddressLine>
            <CityName>Frankfurt</CityName>
            <CountryName>Germany</CountryName>
          </Address>
          <Email>partyland@parties.com</Email>
          <CompanyName>PartyLand Company</CompanyName>
        </Contact>
      </Contacts>
    </InvBlock>
  </InvBlocks>
</OTA_HotelInvBlockNotiFRQ>

```

3.1.6.1.2 Sample Response

```

<OTA_HotelInvBlockNotiFRS xmlns="http://www.opentravel.org/OTA/2003/05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Version="1.001"
EchoToken="873298472379867896" TimeStamp="2013-11-17T09:30:47.0Z">
  <Success/>
</OTA_HotelInvBlockNotiFRS>

```


3.1.7 Cancel Block

This message defines the process between publisher and subscriber when an existing block must be cancelled.

3.1.7.1 Sample Scenario

Group Block Publisher sends Group Block Subscriber a notification that the block is to be cancelled. The subscriber sends a response message to the publisher with a success element and not warnings.

Hotel Code:	HXCAIZZ
Group Code:	XMAS13
Group Long Name:	Xmas Group 13
Status:	Cancelled

3.1.7.1.1 Sample Request

```
<OTA_HotelInvBlockNotifRQ xmlns="http://www.opentravel.org/OTA/2003/05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Version="1.001"
EchoToken="873298472379867896" Timestamp="2013-11-17T09:30:47.0Z">
  <POS>
    <Source>
      <RequestorID Type="17" ID="GroupMgt" />
    </Source>
  </POS>
  <InvBlocks>
    <HotelRef HotelCode="HXCAIZZ" />
    <InvBlock InvBlockStatusCode="1" TransactionAction="Cancel"
InvBlockCode="XMAS13" InvBlockLongName="Xmas Group 13">
      </InvBlock>
    </InvBlocks>
  </OTA_HotelInvBlockNotifRQ>
```

3.1.7.1.2 Sample Response

```
<OTA_HotelInvBlockNotifRS xmlns="http://www.opentravel.org/OTA/2003/05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Version="1.001"
EchoToken="873298472379867896" Timestamp="2013-11-17T09:30:47.0Z">
  <Success/>
</OTA_HotelInvBlockNotifRS>
```

3.2 Update Group Inventory

3.2.1 Overview

This message defines the process between publisher and subscriber when updates to group inventory must take place.

3.2.2 Roles

Role Name	Definition	Examples
-----------	------------	----------

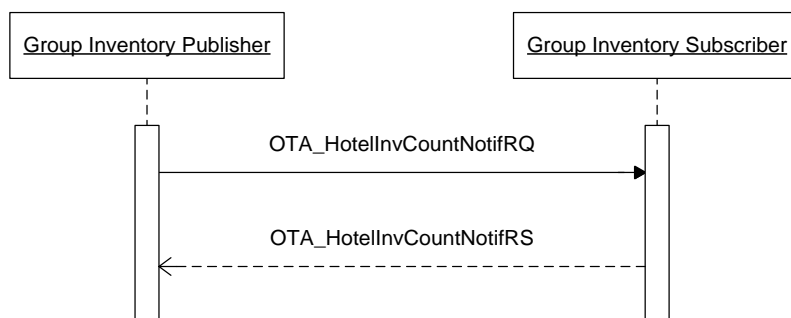
Group Inventory Publisher	A system that maintains group inventory data and notifies Group Inventory Subscriber(s) of changes.	<ul style="list-style-type: none"> • Group Management System • Central Reservation System • Property Management System
Group Inventory Subscriber	A system that requires notification of changes to group inventory data from Publisher system.	<ul style="list-style-type: none"> • Group Management System • Channel Management System • Online Travel Agent • Central Reservation System • Property Management System • Revenue Management System

3.2.3 Use Case

Assumptions:	<ul style="list-style-type: none"> • Publisher and Subscriber have agreed which attributes will be transmitted and accepted. • Publisher and Subscriber have agreed upon a notification model (either real-time or timed interval).
Pre-condition:	None
Trigger:	A change to group inventory data occurs in the Group Inventory Publisher System.
Basic Course of Events:	<ol style="list-style-type: none"> 1. Group Inventory Publisher constructs OTA_HotelInvCountNotifRQ containing the group inventory data. 2. Group Inventory Publisher successfully transmits message payload. 3. Group Inventory Subscriber receives the message payload. 4. Group Inventory Subscriber processes the OTA_HotelInvCountNotifRQ. 5. Group Inventory Subscriber acknowledges with the OTA_HotelInvCountNotifRS indicating processing status of the message (including any relevant warnings). 6. Group Inventory Publisher may update their database to log what was last successfully processed by the Subscriber.
Post-condition:	Group Inventory Subscriber may update their log with what was last successfully processed.

Exception Path 1:	<ol style="list-style-type: none"> 4. At step 3, the Group Inventory Subscriber does not successfully receive the message. 5. Group Inventory Subscriber does not return the OTA_HotelInvCountNotifRS. 6. Group Inventory Publisher may: <ol style="list-style-type: none"> a. Log the unsuccessful send. b. Resend the update notification immediately. c. Re-queue the update notification. d. Wait until the next agreed interval to send an update notification.
Exception Path 2:	<ol style="list-style-type: none"> 4. At Step 4, the Group Inventory Subscriber does not successfully process the message. 5. Group Inventory Subscriber returns OTA_HotelInvCountNotifRS with the appropriate error indicator. 6. Group Inventory Publisher may: <ol style="list-style-type: none"> e. Log the response error. f. Take action to correct the error and/or resend the transaction if necessary. g. Re-queue the update notification. h. Wait until the next agreed interval to send an update notification.
Alternative Paths:	If the Subscriber wishes to take on role of <i>Group Inventory Requester</i> , it then may perform Get Group Inventory .

3.2.4 Message Flows



3.2.5 Sample Scenario

Group Block Publisher sends Group Block Subscriber the updated details on the group inventory. The subscriber sends a response message to the publisher with a success element.

3.2.5.1 Sample Request

```
<OTA_HotelInvCountNotifRQ xmlns="http://www.opentravel.org/OTA/2003/05"
TimeStamp="2013-10-01T09:41:51.982" EchoToken="f46d7b55-a411-45c5-90d8-4187bbbf4ee5"
Target="Production" Version="1.001">
  <POS>
    <Source>
      <RequestorID Type="10" ID="Hotel PMS" />
    </Source>
  </POS>
  <Inventories HotelCode="10001" HotelName="Test Hotel">
    <Inventory>
      <UniqueID Type="16" ID="1" />
      <StatusApplicationControl Start="2014-03-01" End="2014-03-15" InvTypeCode="KING"
AllInvCode="False" InvBlockCode="GRP123" />
      <InvCounts>
        <InvCount CountType="1" Count="20" />
        <InvCount CountType="2" Count="17" />
        <InvCount CountType="6" Count="1" />
        <InvCount CountType="8" Count="2" />
        <InvCount CountType="16" Count="4" />
        <InvCount CountType="17" Count="1" />
        <InvCount CountType="18" Count="6" />
      </InvCounts>
    </Inventory>
  </Inventories>
</OTA_HotelInvCountNotifRQ>
```

3.2.5.2 Sample Response

```
<OTA_HotelInvCountNotifRS xmlns="http://www.opentravel.org/OTA/2003/05"
TimeStamp="2013-10-01T09:41:51.982" EchoToken="f46d7b55-a411-45c5-90d8-4187bbbf4ee5"
Target="Production" Version="1.001">
  <Success/>
</OTA_HotelInvCountNotifRS>
```

3.3 Update Group Rates

3.3.1 Overview

The Update Group Rates scenario covers the pushing of group rates from one system to another.

3.3.2 Roles

Role Name	Definition	Examples
Group Rates Publisher	A system that maintains group rate data and notifies Group Rates Subscriber(s) of changes.	<ul style="list-style-type: none">• Group Management System• Central Reservation System• Property Management System• Channel Management System• Revenue Management System

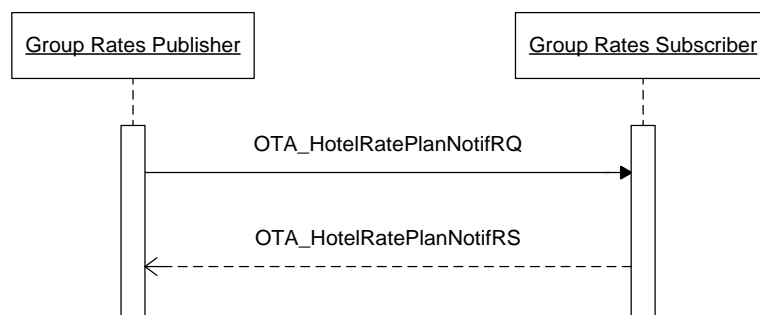
Group Rates Subscriber	A system that requires notification of changes to group rate data from Publisher system.	<ul style="list-style-type: none">• Group Management System• Channel Management System• Online Travel Agent• Central Reservation System• Property Management System• Revenue Management System
------------------------	--	---

3.3.3 Use Case

Assumptions:	<ul style="list-style-type: none">• Publisher and Subscriber have agreed which attributes will be transmitted and accepted.• Publisher and Subscriber have agreed upon a notification model (either real-time or timed interval).
Pre-condition:	None
Trigger:	A change to group rates data occurs in the Group Rates Publisher System.
Basic Course of Events:	<ol style="list-style-type: none">1. Group Rates Publisher constructs OTA_HotelRatePlanNotifRQ containing the group rate data.2. Group Rates Publisher successfully transmits message payload.3. Group Rates Subscriber receives the message payload.4. Group Rates Subscriber processes the OTA_HotelRatePlanNotifRQ.5. Group Rates Subscriber acknowledges with the OTA_HotelRatePlanNotifRS indicating processing status of the message (including any relevant warnings).6. Group Rates Publisher may update their database to log what was last successfully processed by the Subscriber.
Post-condition:	Group Rates Subscriber may update their log with what was last successfully processed.
Exception Path 1:	<ol style="list-style-type: none">1. At step 3, the Group Rates Subscriber does not successfully receive the message.2. Group Rates Subscriber does not return the OTA_HotelRatePlanNotifRS.3. Group Rates Publisher may:<ol style="list-style-type: none">a. Log the unsuccessful send.b. Resend the update notification immediately.c. Re-queue the update notification.d. Wait until the next agreed interval to send an update notification.

Exception Path 2:	<ol style="list-style-type: none"> 1. At Step 4, the Group Rates Subscriber does not successfully process the message. 2. Group Rates Subscriber returns OTA_HotelRatePlanNotifRS with the appropriate error indicator. 3. Group Rates Publisher may: <ol style="list-style-type: none"> i. Log the response error. j. Take action to correct the error and/or resend the transaction if necessary. k. Re-queue the update notification. l. Wait until the next agreed interval to send an update notification.
Alternative Paths:	If the Subscriber wishes to take on role of <i>Group Rates Requester</i> , it then may perform Get Group Rates .

3.3.4 Message Flows



3.3.5 Sample Scenario

PMS "ABC" needs to transmit the following Rate download to CRS "123":

MessageContentCode:	Group rate
Hotel Code:	HXCAIZZ
Group Code or:	AGROUPG
Start date:	December 20, 2013
End date:	December 31, 2013
Short Description:	GROUP A short description
Long Description:	Group A description
Currency:	Euro
Child rate percentage:	50
Room Type:	2T
Single price:	100.00
Full price:	180.00

Extra bed price: 30
Exception pricing:
Single price: 120.00
Full price: 200.00
Extra bed price: 50

3.3.5.1 Sample Request

```
<OTA_HotelRatePlanNotiFRQ xmlns="http://www.opentravel.org/OTA/2003/05"
TimeStamp="2013-08-03T09:30:47-05:00" EchoToken="0b272508-f5c0-46c7-a9d6-d62902b14baf"
Target="Production" Version="1.001" MessageContentCode="9">
  <!-- MessageContentCode=9 for Group Rate Update -->
  <POS>
    <Source>
      <RequestorID Type="10" ID="Hotel PMS"/>
    </Source>
  </POS>
  <RatePlans HotelCode="HXCAIZZ">
    <RatePlan RatePlanNotiFType="New" RatePlanCode="AGROUP" RatePlanCategory="G"
Start="2013-12-20" End="2013-12-31" CurrencyCode="EUR" YieldableIndicator="false"
MarketCode="G" InventoryAllocatedInd="true">
      <Rates>
        <Rate RateTimeUnit="Day" UnitMultiplier="1" InvTypeCode="C2T"
CurrencyCode="EUR" Sat="1" Sun="1" Mon="0" Tue="0" Weds="0" Thur="0" Fri="1">
          <BaseByGuestAmts>
            <BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="1"
AmountAfterTax="120.00"/>
            <BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="2"
AmountAfterTax="200.00"/>
          </BaseByGuestAmts>
          <AdditionalGuestAmounts>
            <AdditionalGuestAmount Amount="50.00" AgeQualifyingCode="8"/>
            <AdditionalGuestAmount Amount="50.00" AgeQualifyingCode="10"/>
          </AdditionalGuestAmounts>
        </Rate>
        <Rate RateTimeUnit="Day" UnitMultiplier="1" InvTypeCode="C2T"
CurrencyCode="EUR" Sat="0" Sun="0" Mon="1" Tue="1" Weds="1" Thur="1" Fri="0">
          <BaseByGuestAmts>
            <BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="1"
AmountAfterTax="100.00"/>
            <BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="2"
AmountAfterTax="180.00"/>
          </BaseByGuestAmts>
          <AdditionalGuestAmounts>
            <AdditionalGuestAmount Percent="50" AgeQualifyingCode="8"/>
            <AdditionalGuestAmount Amount="30.00" AgeQualifyingCode="10"/>
          </AdditionalGuestAmounts>
        </Rate>
      </Rates>
      <Description Name="Short description">
        <Text>Group A short description</Text>
      </Description>
      <Description Name="Long description">
        <Text>Group A description</Text>
      </Description>
    </RatePlan>
  </RatePlans>
</OTA_HotelRatePlanNotiFRQ>
```

3.3.5.2 Sample Response

```
<OTA_HotelRatePlanNotiFRS xmlns="http://www.opentravel.org/OTA/2003/05"
TimeStamp="2013-08-03T09:30:47-05:00" EchoToken="0b272508-f5c0-46c7-a9d6-d62902b14baf"
Target="Production" Version="1.001">
  <Success/>
</OTA_HotelRatePlanNotiFRS>
```

3.4 Get Group Inventory

3.4.1 Overview

The Get Group Inventory scenario provides the ability to get inventory values for the group.

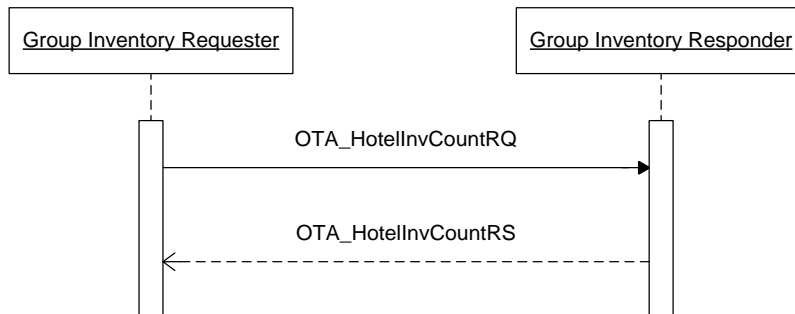
3.4.2 Roles

Role Name	Definition	Example
Group Inventory Requester	A system that has the need to obtain group inventory information.	<ul style="list-style-type: none">• Central Reservation System• Property Management System• Channel Management System• Revenue Management System• Online Travel Agent
Group Inventory Responder	A system that maintains group inventory information.	<ul style="list-style-type: none">• Central Reservation System• Property Management System• Channel Management System• Revenue Management System

3.4.3 Use Case

Assumption:	Requester and Responder have agreed which attributes will be transmitted and accepted.
Pre-condition:	None
Trigger:	Group Inventory Requester, through event or manual action, has determined that it must obtain group inventory information from the Group Inventory Responder.
Basic Course of Events:	<ol style="list-style-type: none">1. Group Inventory Requester constructs OTA_HotelInvCountRQ with the appropriate query parameters.2. Group Inventory Requester successfully transmits message payload.3. Group Inventory Responder receives the message payload.4. Group Inventory Responder processes OTA_HotelInvCountRQ.5. Group Inventory Responder returns the inventory information appropriate to the query parameters, using OTA_HotelInvCountRS.
Post-condition:	Group Inventory Requester may update their database to log what was last successfully processed.
Exception Path:	None
Alternative Path:	None

3.4.4 Message Flows



3.4.5 Sample Request

```
<OTA_HotelInvCountRQ EchoToken="a" TimeStamp="2001-12-17T09:30:47Z" Version="0.0"
Target="Test" xmlns="http://www.opentravel.org/OTA/2003/05">
  <POS>
    <Source>
      <RequestorID Type="17" ID="GroupMgt" />
    </Source>
  </POS>
  <HotelInvCountRequests>
    <HotelInvCountRequest>
      <DateRange End="2014-12-01" Start="2014-12-02" />
      <RoomTypeCandiates>
        <RoomTypeCandidate RoomTypeCode="KING" InvBlockCode="GRP123" />
      </RoomTypeCandiates>
      <HotelRef ChainCode="XX" BrandCode="YY" HotelCode="10001" />
    </HotelInvCountRequest>
  </HotelInvCountRequests>
</OTA_HotelInvCountRQ>
```

3.4.6 Sample Response

```
<OTA_HotelInvCountRS EchoToken="a" TimeStamp="2001-12-17T09:30:47Z" Version="0.0"
Target="Test" xmlns="http://www.opentravel.org/OTA/2003/05">
  <Success/>
  <Inventories ChainCode="XX" BrandCode="YY" HotelCode="10001">
    <Inventory>
      <StatusApplicationControl Start="2014-12-01" End="2014-12-01" InvTypeCode="KING"
InvBlockCodeApply="BlockCode" InvBlockCode="GRP123" />
      <InvCounts>
        <InvCount CountType="16" ActionType="Allocation" Count="12" />
        <InvCount CountType="17" ActionType="Used" Count="5" />
        <InvCount CountType="18" ActionType="Remaining" Count="7" />
      </InvCounts>
    </Inventory>
    <Inventory>
      <StatusApplicationControl Start="2014-12-02" End="2014-12-02" InvTypeCode="KING"
InvBlockCodeApply="BlockCode" InvBlockCode="GRP123" />
      <InvCounts>
        <InvCount CountType="16" ActionType="Allocation" Count="10" />
        <InvCount CountType="17" ActionType="Used" Count="4" />
        <InvCount CountType="18" ActionType="Remaining" Count="6" />
      </InvCounts>
    </Inventory>
  </Inventories>
</OTA_HotelInvCountRS>
```

3.5 Get Group Rates

3.5.1 Overview

This process describes the interaction between systems where the rate information pertaining to a group can be obtained.

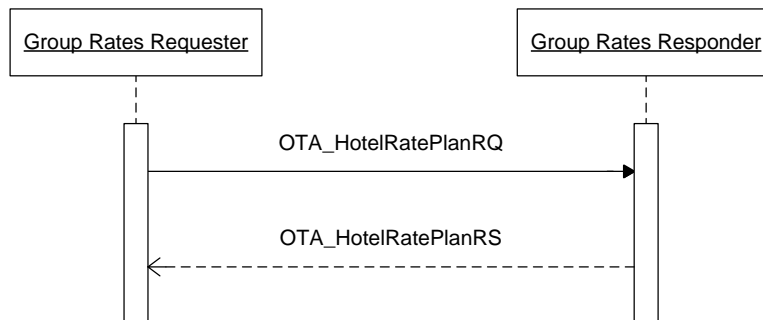
3.5.2 Roles

Role Name	Definition	Example
Group Rates Requester	A system that has the need to obtain group rate information.	<ul style="list-style-type: none">Central Reservation SystemProperty Management SystemChannel Management SystemRevenue Management SystemOnline Travel Agent
Group Rates Responder	A system that maintains group rate information.	<ul style="list-style-type: none">Central Reservation SystemProperty Management SystemChannel Management SystemRevenue Management System

3.5.3 Use Case

Assumption:	<ul style="list-style-type: none">Requester and Responder have agreed which attributes will be transmitted and accepted.The Requester knows which rate plans are valid for the group block.
Pre-condition:	None
Trigger:	Group Rates Requester, through event or manual action, has determined that it must obtain group rates information from the Group Rates Responder.
Basic Course of Events:	<ol style="list-style-type: none">Group Rates Requester constructs OTA_HotelRatePlanRQ with the appropriate query parameters.Group Rates Requester successfully transmits message payload.Group Rates Responder receives the message payload.Group Rates Responder processes OTA_HotelRatePlanRQ.Group Rates Responder returns the rate information appropriate to the query parameters, using OTA_HotelRatePlanRS.
Post-condition:	Group Rates Requester may update their database to log what was last successfully processed.
Exception Path:	None
Alternative Path:	None

3.5.4 Message Flows



3.5.5 Sample Request

```
<OTA_HotelRatePlanRQ xmlns="http://www.opentravel.org/OTA/2003/05" Version="1.001"
TimeStamp="2013-08-03T09:30:47-05:00 EchoToken="7a864e76-dabc-4483-9f10-5f0920d3586c"
Target="Production" Version="1.001">
  <POS>
    <Source>
      <RequestorID ID="CRes" Type="2" />
    </Source>
  </POS>
  <RatePlans>
    <RatePlan>
      <RatePlanCandiates>
        <RatePlanCandiate RatePlanCode="G1" />
      </RatePlanCandiates>
      <HotelRef HotelCode="10107" />
    </RatePlan>
  </RatePlans>
</OTA_HotelRatePlanRQ>
```

3.5.6 Sample Response

```
<OTA_HotelRatePlanRS xmlns="http://www.opentravel.org/OTA/2003/05" Version="1.001"
TimeStamp="2013-08-03T09:30:47-05:00 EchoToken="7a864e76-dabc-4483-9f10-5f0920d3586c"
Target="Production" Version="1.001" MessageContentCode="9">
  <Success/>
  <!-- MessageContentCode=9 for Group Rate Update -->
  <RatePlans HotelCode="10107">
    <RatePlan RatePlanNotifyType="New" RatePlanCode="G1" RatePlanCategory="G"
Start="2013-12-20" End="2013-12-31" CurrencyCode="EUR" YieldableIndicator="false"
MarketCode="Test1" InventoryAllocatedInd="true" IsCommissionable="1">
      <Rates>
        <Rate RateTimeUnit="Day" UnitMultiplier="1" InvTypeCode="C2T"
CurrencyCode="EUR" Sat="1" Sun="1" Mon="0" Tue="0" Weds="0" Thur="0" Fri="1">
          <BaseByGuestAmts>
            <BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="1"
AmountAfterTax="120.00" />
            <BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="2"
AmountAfterTax="200.00" />
          </BaseByGuestAmts>
          <AdditionalGuestAmounts>
            <AdditionalGuestAmount Percent="50" AgeQualifyingCode="8" />
            <AdditionalGuestAmount Amount="50.00" AgeQualifyingCode="10" />
          </AdditionalGuestAmounts>
        </Rate>
        <Rate RateTimeUnit="Day" UnitMultiplier="1" InvTypeCode="C2T"
CurrencyCode="EUR" Sat="0" Sun="0" Mon="1" Tue="1" Weds="1" Thur="1" Fri="0">
          <BaseByGuestAmts>
```

```
<BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="1"
AmountAfterTax="100.00"/>
<BaseByGuestAmt AgeQualifyingCode="10" NumberOfGuests="2"
AmountAfterTax="180.00"/>
</BaseByGuestAmts>
<AdditionalGuestAmounts>
  <AdditionalGuestAmount Percent="50" AgeQualifyingCode="8"/>
  <AdditionalGuestAmount Amount="30.00" AgeQualifyingCode="10"/>
</AdditionalGuestAmounts>
</Rate>
</Rates>
<Commission Percent="8.50"/>
<Description Name="Short description">
  <Text>Xmas Group 2013</Text>
</Description>
<Description Name="Long description">
  <Text>rate includes Xmas party dinner</Text>
</Description>
</RatePlan>
</RatePlans>
</OTA_HotelRatePlanRS>
```

4 Messages

For a detailed description of the elements and attributes for availability and rates, see the relevant specifications (Messages section):

- [Availability](#)
- [Rates](#)

4.1 Create or Update Block

4.1.1 Data Element Table – Create or Update Group Block Request

Element @Attribute	Num	Description/Contents
OTA_HotelInvBlockNotifRQ	1	Root element of the message.
@EchoToken	0..1	A reference for additional message identification, assigned by the requesting host system. When a request message includes an echo token the corresponding response message MUST include an echo token with an identical value.
@TimeStamp	1	Time of the transaction.
@Version	1	Version is a mandatory attribute in OTA; therefore, it must remain Mandatory in HTNG in order to be able to use the same message.
OTA_HotelInvBlockNotifRQ / POS	0..1	POS provides a mechanism to indicate the source of the message.
OTA_HotelInvBlockNotifRQ / POS / Source	1	This holds the details about the requestor. It may be repeated to also accommodate the delivery systems.
OTA_HotelInvBlockNotifRQ / POS / Source / RequestorID	1	An identifier of the entity making the request (e.g. ATA/IATA/ID number, Electronic Reservation Service Provider (ERSP), Association of British Travel Agents.(ABTA)).
@ID	1	The ID used will be agreed by the trading partners and remain the same throughout the messages.
@Type	1	Type attribute uses the OpenTravel Alliance code list UIT and ID is used for the name or ID of the requestor. For example, type 22 – ERSP (Electronic reservation service provider) and ID: TrustCRS.
OTA_HotelInvBlockNotifRQ / InvBlocks	1	At least one InvBlocks containing 1 InvBlock element should be sent for the message to have meaning.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock	1...n	At least one InvBlock element should be sent for the message to have meaning. For multiple sub block or attendee types, this could be repeated.

Element @Attribute	Num	Description/Contents
@InvBlockStatusCode	0..1	Refers to OpenTravel Alliance IBS and indicates the status of the block (such as Tentative, Definite, etc.).
@InvBlockCode	1	String to identify the Block as a code using the Group system code convention.
@PMS_InvBlockID	0..1	This is used as a cross reference to the property management system (e.g., PMS Group Master Number).
@InvBlockLongName	0..1	This is the full name of the inventory block.
@RestrictedBookingCodeList	0..1	Enables the user to restrict the type of entities that can book the inventory block. Refers to the UIT OpenTravel Alliance code list. To restrict the inventory block so that only the hotel can book it, this would be set to code 10 = Hotel.
@TransactionAction	1	Enumerated list that describes the action associated to the message. Used to set a new block, modify, cancel or other action as per enumerated list to be agreed between partners.
@TransactionDetail	0..1	String. Used to specify: Inventory consuming/NOT inventory consuming.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / HotelRef	1	Not mandatory in OpenTravel Alliance but is Mandatory in the HTNG recommendation. This is the element containing the code of the property whose inventory blocks are being updated.
@HotelCode	1	Not mandatory in OpenTravel Alliance but is Mandatory in the HTNG recommendation. This is the code of the property whose inventory blocks are being updated.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / InvBlockDates	1	This is used to indicate the date or date range applicable to this inventory block.
@Start	1	Not mandatory in OpenTravel Alliance but is Mandatory in the HTNG recommendation. This is the first day for which the inventory block update is being sent.
@End	1	Not mandatory in OpenTravel Alliance but is Mandatory in the HTNG recommendation. This represents the last date for which the inventory block update is being sent.
@AbsoluteCutoff	0..1	Used to determine when the inventory block is released back into house inventory.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType	1...n	Should be repeated for each room type that is part of the block as it will also contain allocations and rates for the specific room type.

Element @Attribute	Num	Description/Contents
@RoomTypeCode	1	Mandatory. Room type codes of each room type used as part of the block.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType / RoomTypeAllocations	0..n	This allows for multiple allocations to be blocked for a specific room type.
@RoomTypePickUpStatus	1	Ability to specify Inventory Count Type (i.e.: 16 Group authorized, 17 Groups sold, 18 Group available). For backward compatibility, 1 Physical, 2 Definitive availability, 3 Tentative availability, 4 Definite sold, 5 Tentative sold) will continue to be supported
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType / RoomTypeAllocations / RoomTypeAllocation	1..n	This is the number of rooms blocked for a specific room type for specific dates.
@Start	0..1	Used in conjunction with END to determine different number of rooms of a specific type for different dates.
@End	0..1	Used in conjunction with START to determine different number of rooms of a specific type for different dates.
@NumberOfUnits	1	Mandatory. Number of units of a specific type that are allocated as part of the inventory block. Comments have been submitted to Open Travel to allow 0 in this field.
@SellLimit	0..1	This is the contracted quantity or ceiling of inventory which may differ from the NumberOfUnits.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType / RatePlans / RatePlan	0..1	This is a specific rate plan defined for a specific room type.
@RatePlanCode	1	Mandatory. Rate plan used for the inventory block. If no further rate information is included, the rate plan code refers to rate plan information already passed using the OTA_HotelRatePlanNotifRQ message.
@CurrencyCode	0..1	This is the currency associated to the rate assigned to the block – it could be different than the currency loaded for the property.
@NumberOfUnits	0..1	If NO room type allocations are transferred, this reflects the number of rooms of the specific type allocated at the specific rate for the block.

Element @Attribute	Num	Description/Contents
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType / RatePlans / RatePlan / BaseByGuestAmts	0..1	A collection of Base charges by number of guests.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType / RatePlans / RatePlan / BaseByGuestAmts / BaseByGuestAmt	1..n	Conditionally Mandatory. AT LEAST 1 INSTANCE FOR NUMBEROFGUESTS = 1 is Mandatory if the rate information is being defined in the message. Must be repeated for all different types of occupancies of the specific room. We recommend that for varying rates by occupant should be implemented like this.
@NumberOfGuests	1	The NumberOfGuest Attribute indicates what type of rate is being passed – if NumberOfGuests is = 1 then we are transmitting a single rate, if higher than 1 then it is a double or full occupancy rate.
@AmountBeforeTax or @AmountAfterTax	1	Either @AmountBeforeTax or AmountAfterTax is Mandatory for each @NumberOfGuests. Partners must select whether to send either the @AmountBeforeTax or @AmountAfterTax (or both) attributes.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType / RatePlans / RatePlan / AdditionalGuestAmounts / AdditionalGuestAmount	0..n	Used to transfer extra adult and extra child amount.
@AgeQualifyingCode	0..1	AgeQualifyingCode – 8 = child, 10 = adult.
@Percent OR @Amount	0..1	This is the percentage of the single rate that represents the child rate. Could also be expressed as fixed amount.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / RoomTypes / RoomType / RatePlans / RatePlan / MarketCode	0..1	This is user specific information used for tracking and market segmentation reporting.
@MarketCode	1	The company specific code that relates to the market being sold to (e.g. corporate, government, association, social).
@MarketCodeName	0..1	The descriptive name of the code that relates to the market being sold to (e.g. corporate, government, association, social).
@SourceOfBusiness	0..1	The source of the business.

Element @Attribute	Num	Description/Contents
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / MethodInfo	0..1	This is used to indicate the reservation and billing methods for a single inventory block.
@BillingType	0..1	BillingType is used to indicate charges to be billed to master account (enumeration).
@SignFoodAndBev	0..1	SignFoodAndBev is a Boolean to indicate whether food and drinks should be billed to master account.
@ReservationMethodCode	0..1	ReservationMethodCode indicates the method by which reservations are received.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / BlockDescriptions / BlockDescription	0..99	BlockDescription can be repeated as necessary to provide additional comments/descriptions on the specific block.
OTA_HotelInvBlockNotifRQ / InvBlocks / InvBlock / BlockDescriptions / BlockDescription / Text	1	Used for free form descriptive information about the inventory block.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact	1..99	This element and its sub-elements can be repeated to include all contact information needed. It is down to implementing partners to agree which contacts would be captured by either system and which contacts should indeed be exchanged. At the very least the Group Organizer details should be transferred.
@ContactType	0..1	Indicates the type of contact: Group Organizer Lead Source, Sales manager, Catering manager, Service manager, Travel agency, Company, etc.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / PersonName	0..1	This element and sub-elements will be sent to transfer the name of contacts that are "INDIVIDUAL." To transfer COMPANY/TA details, the OTA_HotelInvBlockNotifRQ/InvBlocks/ Contacts/Contact/CompanyName path should be used as highlighted below.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / PersonName / NamePrefix	0..1	Optional but should be highly recommended by HTNG that partners use it if possible. This path is used to transmit the Contact's details. This field would be used to pass the contact's name Prefix.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / PersonName / GivenName	0..1	This field would be used to pass the contact's First name.

Element @Attribute	Num	Description/Contents
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / PersonName / MiddleName	0..1	This field would be used to pass the contact's Middle name.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / PersonName / Surname	1	If a contact is passed then at least Surname must be passed. This field would be used to pass the contact's Surname.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / CompanyName	0..1	This element and attributes will be sent to transfer the name of contacts that are "Organizations." To transfer individual details, the OTA_HotelInvBlockNotifRQ/InvBlocks/ Contacts/Contact/PersonName path should be used as highlighted above.
@CompanyShortName	0..1	Used to provide the Company common name.
@Code	0..1	Identifies the company by the company code.
@CodeContext	0..1	Identifies the context of the identifying code, such as DUNS, IATA, or internal code, SIC, etc.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Telephone	0..5	This field would be used to pass the contact's phone number and fax numbers.
@PhoneLocationType @PhoneTechType @CountryAccessCode @Area City Code @DefaultInd	0	<p>The PhoneLocationType attribute refers to the OpenTravel Alliance PLT code list and indicates where the phone number is based – the two codes to be used by HTNG are code 7 – Home and code 8 – Office.</p> <p>The PhoneTechType attribute refers to the OpenTravel Alliance PTT code list and indicates which type of number is transmitted (phone <i>versus</i> fax). The two codes to be used by HTNG are code 1 – Voice and code 3 – Fax. 5 – Mobile</p> <p>CountryAccessCode and Area City Code should be Optional. If country code and area code are passed then they should not appear again in the PhoneNumber field.</p> <p>DeafultInd is Optional and would indicate whether the phone number is the primary phone number for the profile.</p>

Element @Attribute	Num	Description/Contents
@Phone Number @FormattedInd	1	<p>PhoneNumber contains the actual number as a string of max 32 characters and it is Mandatory.</p> <p>FormattedInd is Mandatory. If the partner can use Country and Area codes then FormattedInd would be set to NO.</p> <p>If the partner cannot use country and area code then entire number is passed in the PhoneNumber field and FormattedInd it should be set to YES if the number needs to be parsed as there is a separation of the different parts or set to NO to indicate that the PhoneNumber field contains the entire phone number without a specific format.</p>
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Email	0..1	Optional. This field would be used to pass the contact's email address.
@EmailType @DefaultInd	0..1	<p>The Email Type attribute uses the OpenTravel Alliance code list EAT and indicates the type of email address provided (personal – code 1 <i>versus</i> business – code 2, in the case of the Guest details) and must be passed if more than one email address is passed. If only one email address is passed it can be Optional.</p> <p>DefaultInd is Optional and would indicate whether the email is the primary email for the profile.</p>
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Address	0..1	If a contact is passed then at least one address must be passed. This field would be used to pass the contact's mail address.
@Type	0..1	The Type attribute uses the OpenTravel Alliance code list CLT and indicates the type of address provided (Home – code 1 <i>versus</i> business – code 2 or Other – code 3, in the case of the Guest details). If more than one address element is sent, this attribute is required.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Address / AddressLine	0..5	This field would be used to pass the contact's address. More than one line can be sent.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Address / CityName	0..1	This field would be used to pass the contact's city.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Address / StateProv	0..1	State or Province name (e.g., Texas).
@StateCode	0..1	This field would be used to pass the contact's State expressed in the Standard 2–8 characters code.

Element @Attribute	Num	Description/Contents
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Address / PostalCode	0..1	This field would be used to pass the contact's Postal/ZIP code.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / Address / CountryName	0..1	Country name (e.g., Ireland).
@Code	0..1	Optional. This field would be used to pass the contact's Country expressed in the Standard ISO 3166 code.
OTA_HotelInvBlockNotifRQ / InvBlocks / Contacts / Contact / URL	0..5	Web site address of the contact in IETF specified format.

4.1.2 Data Element Table – Create or Update Group Block Response

Element @Attribute	Num	Description/Contents
OTA_HotelInvBlockNotifRS	1	
@EchoToken	0..1	A reference for additional message identification, assigned by the requesting host system. When a request message includes an echo token the corresponding response message MUST include an echo token with an identical value.
@Version	1	Version is a mandatory attribute in OTA; therefore, it must remain Mandatory in HTNG in order to be able to use the same message.
@TimeStamp	1	Not mandatory in OpenTravel Alliance but is Mandatory in the HTNG recommendation – time of the transaction.
OTA_HotelInvBlockNotifRS / Errors / Error	0..1	Mandatory in OTA. Refers to OpenTravel Alliance EWT list (error warning type).
@Type	1	The Error element MUST contain the Type attribute that uses a recommended set of values to indicate the error type. The validating XSD can expect to accept values that it has NOT been explicitly coded for and process them by using Type = "Unknown." Refer to OpenTravel Code List Error Warning Type (EWT).
@Code	0..1	Optional. Refers to OpenTravel Alliance list ERR. Should be used wherever possible.
@RecordID	0..1	Optional. If the receiving system is able to identify within a batch of inventory blocks messages which specific message failed, the InvBlockCode of the specific inventory that failed should be reported here.

Element @Attribute	Num	Description/Contents
OTA_HotelInvBlockNotifRS / Success	0..1	This is the annotation that the inventory block message batch was received successfully. It could be combined with warning messages if some of the messages in the batch had issues.
OTA_HotelInvBlockNotifRS / Warnings / Warning	0..1	Refers to OpenTravel Alliance EWT list (error warning type).
@Type	1	The Warning element MUST contain the Type attribute that uses a recommended set of values to indicate the warning type. The validating XSD can expect to accept values that it has NOT been explicitly coded for and process them by using Type = "Unknown." Refer to OpenTravel Code List Error Warning Type (EWT).
@Code	0..1	Optional. Refers to OpenTravel Alliance list ERR. Should be used wherever possible.
@RecordID	0..1	Optional. If the receiving system is able to identify within a batch of inventory block messages which specific inventory block failed, the Inventory Block code of the inventory block that failed should be reported here.
OTA_HotelInvBlockNotifRS / InvBlockCodeRefs / InvBlockCodeRef	0..1	Optional. Used to reconfirm back to the sending partner the inventory block that was uploaded. It is up to the trading partners whether to use this field.
@InvBlockCode	1	Identifies the inventory block; code assigned by the originator of the request message.
OTA_HotelInvBlockNotifRS / InvBlockCodeRefs / InvBlockCodeRef	0..1	Optional. Used to reconfirm back to the sending partner the inventory block that was uploaded using the code created for that inventory code by the receiving system. It is up to the trading partners whether to use this field.
@InvSystemInvBlockCode	1	The InvBlockCode assigned by the inventory system in response to an inventory block notification.
OTA_HotelInvBlockNotifRS / InvBlockCodeRefs / HotelRef	0..1	Optional. Used to reconfirm back to the sending partner the hotel for which the inventory block(s) were sent.
@HotelCode	1	The code that uniquely identifies a single hotel property. The hotel code is decided between vendors.

5 Appendices

5.1 Glossary of Terms

For the purpose of this document the following terms have been defined as follows:

Term	Definition
Extensible Markup Language (XML)	A general-purpose markup language for creating special-purpose markup languages, capable of describing different kinds of data.
Group Block Publisher	A system that maintains group block data and notifies Group Block Subscriber(s) of changes.
Group Block Requester	A system that has the need to obtain group block information.
Group Block Responder	A system that maintains group block information.
Group Block Subscriber	A system that requires notification of group block data from Publisher system.

5.2 Implementation Notes

5.2.1 Errors and Warnings

The response messages have an option between sending a Success element with an optional collection of Warning elements or a collection of Error elements. It has been agreed that when the request message is not processed the response will only have error elements. When the message is processed then the Success element will be sent, along with any warnings indicating issues that did not prevent the processing but should result in some future correction by the implementers of the message.

5.3 Referenced Documents

The following table shows the documents upon which this document depends:

Document Title	Location/URL
Other HTNG Product Distribution specifications	Outline of most recent versions available on workgroup's wiki page
OpenTravel Alliance Specifications	www.opentravel.org/specifications