



BUSINESS ANALYTICS TRANSACTIONAL EXTRACT SPECIFICATION

For Financial Transactions,
Reservations, Blocks, Point of Sale and
Guest Requests

August 22, 2022

About HTNG

Hospitality 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. HTNG is recognized as the leading voice of the global hospitality community, articulating the technology requirements of hotel companies of all sizes to the vendor community. HTNG facilitates 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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1 The Value of Analytics

The lifeblood of any analytics approach is to acquire a hotel's data, which requires integrations, typically with a hotel's property management system (PMS). For hotels, this is a costly and timely process, even if the product they plan to use has the necessary integration components and the hotel is using the correct version of the PMS. This also becomes a significant bottleneck for the PMS companies, as supplier after supplier requests their own unique data and integrations.

The result is an especially hard industry to innovate in due to the fragmentation, on-premises nature of most systems, and the lack of investment in up-to-date data formats and delivery methodologies. Systems hosted in the basement of the hotel might be perceived as secure, but they provide little opportunity to leverage the data in an industry that is rolling (slowly) toward entry into the data economy.

The less friction there is to exchange data, the faster and easier it will be to integrate systems and increase the potential for innovation. Obviously, the answer isn't to simply go out and start building their own operating systems. Instead, hotel operators must start to challenge vendors and decide if their data is sufficiently accessible to permit future innovations. Comparatively, hotels cannot just sit back and wait for the entrepreneurs - the same mindset has to sit within the hotel operation, where Research and Development (R&D) teams need to experiment with different technologies.

Our industry is undergoing significant change where hoteliers become technologists, and securing data freedom through logical collection and storage procedures is the first step in a longer journey.

This Business Analytics Transactional Extract Specifications Document will assist in reducing that friction. By standardizing data from different sources into one clearly defined set of raw, transactional data, the base for meaningful data mining and analytics is laid.



2 DOCUMENT INFORMATION

2.1 DOCUMENT HISTORY

Version	Date	Author	Comments
1.0	7 June 2019	BATE Team	Phase I Publication – Reservation, Financial Transaction and Block
2.0	15 March 2021	BATE Team	Phase II Publication – POS
3.0	18 April 2022	BATE Team	Phase III Publication – Guest Request

2.2 DOCUMENT PURPOSE

Currently, there are many methods for extracting aggregated transactional data, but no standards to extract raw, detailed transactional data from many hospitality business systems to perform business analytics. This document aims to define and establish a specification to solve this problem.

2.3 SCOPE

This specification focuses particularly on Business Analytics Transactional Extracts (BATE) for Financial Transactions, Reservation Data and Group Blocks. Phase II of the BATE Workgroup covered Point of Sale (POS) scenarios for Front of House and Back of House while Phase III focuses on Guest Request messages. The scope for phase III was narrowed to requests made at the time of stay, not those pre or post stay.

Discussions for Phase IV of the specification include, housekeeping, staffing, profile, and financial transactions for events (BEOs, Banquet Checks, Event Booking).

2.4 RELATIONSHIP TO OTHER STANDARDS

This specification and its supporting schemas leverage the existing OpenTravel Alliance methodology for message construction and it draws upon data definitions common to several HTNG specifications as of March 2021.

Related specifications:

- [HTNG Product Distribution Seamless Shop and Book](#)
- [HTNG Eventing](#)
- [HTNG Bulk Data](#)
- [Open Travel Alliance Specifications](#)
- [OTA Payment Method Code List](#)

2.5 USEFUL RESOURCES

- [Implementing Web Services Using HTNG Specifications – A Quick Start Guide for Software Developers](#)



2.6 AUDIENCE

This document is written for anyone considering the use of analytics in a hospitality context. For revenue managers, CIOs, and other management professionals who provide data and interpret it, this document will help clarify what data points can be used in those analyses. For PMS, POS, CRS, CRM, systems that handle guest requests, and other technology vendors that need to interface with analytics systems, conforming with the standards set forth in this document will allow for easier integrations. For technology professionals who work on the analytics platforms themselves, this document will inform on what to expect in hospitality, as well as serve as a reference for integration partners that do not know how to optimize their data structures for analytics.

2.7 KNOWN LIMITATIONS

This document has the following limitations that will be addressed in future iterations:

- **Guest Information in Reservation and Block Messages:** Due to GDPR, the only guest information included in this version will be an anonymous ID. In future versions of this specification, additional details will be added to provide analytics on guest data without violating GDPR.

2.8 FURTHER CONSIDERATIONS

Consistency is important when designing standard specifications. To that end, here are a few notes regarding fields and consistencies:

- **Dates:** Date formats, per HTNG standards, are all in ISO8601 format. Dates in this format should have an associated time zone or an offset. If neither is specified, UTC with no offset is assumed. Throughout the specification, when referencing reservations, 'End Date' is inclusive except when 'end' refers to a check-out date. 'Business Date' is dependent on the implementer's process for closing their books at the end of each day, avoiding situations such as walk-ins at 1:00 a.m. or having a start date prior to the reservation date.
- **Names and Codes:** In this specification, the primary key for a given element is the 'Name' field with an optional additional field for a 'Code.' If you only have one of the two available, the 'Name' field should be used as the unique identifier regardless of your internal naming convention. If you have both fields available and want the 'Code' to be the unique identifier, you can use that in the 'Name' field.
- **Enumerated Lists:** This specification uses various enumerated lists for field validation that correspond with existing OpenTravel and HTNG standard lists. However, in many cases, there are available values in the standard lists that can convolute analytics, so while there is significant overlap, the enumerated lists are unique to this specification unless otherwise noted in the field description.

In many of the enumerated lists referenced in this specification, the business logic behind the values is not explicitly constrained; this is by design. Definitions of guest type such as 'child' can vary, as can status values such as 'Optional' versus 'Tentative.' The most important thing is that



the values are used consistently. Whether the child cut-off age is 12 versus 14 years old is less relevant than picking a value and sticking to it.

- **Updates:** As is standard with reservations in existing OpenTravel and HTNG specifications, when updating a dataset, send a full overlay of data instead of only the fields that change. This serves as a much easier integration between two entities that are otherwise both compliant with this specification.
- **Data Granularity:** This specification provides the most analysis when data is provided at the most detailed level. For the greatest benefit and flexibility, data at the most granular level should be provided. This is true regardless of the frequency of submission.



3 BUSINESS SCENARIOS

The following business scenarios illustrate the value of analytics for drawing actionable conclusions and the helpfulness of raw data extractions in preparation for analytics. Each scenario will relate to one or more of the sample messages in [Section 4](#).

3.1 ADVERTISING SPEND BUDGET

The hotel is ready to embark on a regional advertising campaign for weekend leisure customers and wants to determine which regions to focus its spending and efforts on. The data analytics organization has been asked to generate a report showing how many guests arrived on Friday or Saturday night for a two- or three-night stay from each region. Additionally, they want to know how many of those guests indicated they were traveling for leisure versus business purposes or did not provide the purpose of their travel. The hotel sales and marketing staff will use this information to target the areas that should attract the most customers.

This scenario requires data within the Reservation Message.

3.2 PICKUP ANALYSIS

The revenue manager is worried about the pickup of revenue for the rest of the month of March; he can see compared to last year's final numbers, he is way behind. He would like to see what the revenue pickup looked like at the same time the previous year to identify how the reservations developed over the rest of the month. If that last year's pickup was better at the same time, he will have to act quickly to ensure his pickup increases to match or surpass last year's results.

This scenario requires data within the Reservation Message.

3.3 GUEST SEGMENTATION

Marketing would like to identify which of their guests prove to be the most lucrative for the hotel, do some targeted campaigns, and invite them back to stay. They want to look particularly at the long-term value of the guest to them. For this, they would like to see the forecasted revenue versus the achieved spending by market segment and guest type. This will allow them to see the most interesting segments of guests, not only from a specified room rate but also from an ancillary spend perspective.

This scenario requires data within the Reservation and Financial Transaction Messages.

3.4 MARKETING EFFICACY

Marketing did a chainwide promotion to entice customers from specific regions to visit the hotels. Marketing would now like to see the efficacy of the promotion by getting a report of all guests during a specific timespan based on region and filtered by promotional code. They would like to compare this to the same time last year and customer origins to compare the occupancy numbers. Based on this, they will decide whether to adjust or simply re-run the campaign.

This scenario requires data within the Reservation Message.



3.5 EVENT-DRIVEN REVENUE FORECAST

Every year there is a big automobile tradeshow in the city. Rooms are usually reserved and often sold as far as two years in advance. The revenue manager needs to decide which big companies or travel agencies to work with to ensure maximum revenue for the hotel. One month out from the tradeshow, he will want to compare blocks of pickup room nights by travel agents and companies from two years ago to the present. Based on this information, he will decide which company or travel agency will likely stick to the agreement. He will then look at the average spend of guests during the tradeshow by company and rate code to establish which organization brought the most revenue (not only in room revenue but also additional spending at the hotel). The outcome will determine the appropriate companies and travel agents to allow guests during the tradeshow.

This scenario requires data within the Reservation, Financial Transaction, and Group/Block Messages.

3.6 TOUR OPERATOR VALUE COMPARISON

The reservation manager has a request from a tour operator for discounted rates for the coming year. She now needs to decide whether to grant this or not. She compares the revenue and room nights achieved by the tour operator last year to the forecasted data for this year, adds the current figure on the book data for the whole hotel, and then checks the desired time periods against events in the area before deciding on granting the discount.

This scenario requires data within the Reservation, Financial Transaction, and Group/Block Messages.

3.7 MAINTENANCE AND RENOVATIONS PLANNING

The head housekeeper and the head of maintenance would like to schedule some room renovations. Together with the head of reception, they pull a report to compare the on-the-books occupancy against last year's and the final data. They also consider the forecasted weather and upcoming events before deciding whether or not the rooms requiring renovation can be out of use.

This scenario requires data within the Reservation Message.

3.8 NEW LINE OF BUSINESS

A resort has recently opened a new spa. Before opening, a business plan with a budget and forecast was put in place for the hotel. After two months of operation, the manager would now like to compare assumptions made at the time to the actual numbers achieved, split by resident and non-resident revenue and the market and channel segmentation for granularity. Based on this, he can adjust his business plan, budget and forecast for the next period.

This scenario requires data within the Reservation Message.

3.9 COST ANALYSIS (SPOILAGE)

The kitchen manager is trying to reduce the cost incurred from spoilage. To do so, he wants to improve his prediction of what spoilage may occur. The following variables have been identified as key contributors to spoilage:



- Experience level of the kitchen staff
- Implementation of new recipes
- Consumption trends
- Quality of ingredients
- Events
- Procurement optimization

Each variable is analyzed using the POS message complemented with additional data from a staff management/HR system, recipe configuration system, a database of local events, purchasing, receiving, and inventory (PRI) system, and CRM/direct marketing system.

To improve existing sales and reduce spoilage over the long term, some of the recommended changes based on the analysis include:

- Implementing staff alerts to emphasize sales of items that are deemed to be overstock
- Implementing changes to the training regimen with the intent of reducing food waste
- Making adjustments to recipes to optimize the use of certain ingredients
- Making menu changes
- Using marketing promotions to boost sales on specific items that contain overstocked ingredients compared to historical trends
- Reduce the number of ingredients that are procured with high spoilage rates

This scenario requires data within the POS Message. *(This analysis may require additional data from a staff management/HR system, recipe configuration system, a database of local events, and a CRM/direct marketing system.)*

3.10 CO-BRANDING PRODUCT ANALYSIS

The F&B Manager of the division needs to see trends to negotiate bulk purchase agreements with a supplier. The manager knows that, on average, co-branding a menu item has historically increased its sales by 15%.

If more than one outlet is analyzed, sales data will need to be normalized across all outlets accounting for size, location, opening date, business type and other data to ensure valid conclusions (for example, a small hotel bar that serves food versus an airport restaurant).

After performing the analysis, the manager sees that Heartland Organics Impossible Burgers are a good candidate for co-branding as they have been selling well in many locations. Using this, the manager is able to negotiate a 5% discount on the purchase price to rename the menu item “Heartland Organics Impossible Burger.” Sales increase by 20%, higher than expected, allowing for future negotiation of a better discount with this supplier.

This scenario requires data within the POS Message. *(This analysis may require additional data from the contract system.)*



3.11 LOYALTY

An international hotel group's management would like to see loyalty member patronage of F&B and retail outlets across the APAC region. They would like to see statistics for loyalty guests versus non-loyalty guests broken down by type of outlet, item purchasing trends, average guest spend, etc. They would like to see this matched against events, seasons, and marketing activities, which will help them target their offers more specifically to their members' requirements and attract more members to use their in-house offers.

The aggregated spend statistics will be calculated using the POS specification, and the guest message will be used for dimensional information about party and loyalty. The analysis results highlight certain item categories' purchasing trends, leading the manager to adjust retail offerings and menus seasonally to capitalize on identified trends.

This scenario requires data within the POS Message. *(This analysis may require external data from a CRM system, profile system, additional information on the outlets themselves for type-segmentation and a local events database.)*

3.12 FRAUD

A controller would like to constrain fraudulent practices in the food and beverage and retail operations. Fraud can take many forms in these outlets; some examples include the following:

- The “**floating check scam**” is a practice where items are manipulated from check to check so that servers or bartenders can drop the same check multiple times to cash-paying customers. The check needs only to be tendered one time, at the end of the shift. This practice can often be identified by an unusually high volume of check transfers, checks that stay open for excessive periods of time and reduced sales relative to expected norms.
- The “**buffet scam**” involves selling self-service items to multiple guests, dropping the same check repeatedly (and, if necessary, combining this with the “floating check scam”) to make the check look correct. If the guests are paying with cash, or with a coupon or voucher for their meal, the server can pocket the cash until a guest pays by credit card or room charge. This practice can often be identified by reduced sales in relation to the server's section size.
- The “**walk-out scam**” involves claiming to a manager that a dining room or bar party left the location without paying for their check. The guests did, in fact, pay, however, and paid in cash. In an environment with many servers and many managers, a keen server can leverage confusion and lack of communication amongst harried managers to take advantage of this practice. The scam can often be identified by a higher-than-normal volume of walk-out comps over a given period for a server.
- In quick service or retail environments, the “**no sale scam**” involves taking cash from customers and pocketing the money instead of ringing up the sale. Quick service and retail outlets often sell a high volume of common items – bottled water, fountain beverages, pre-packaged snacks – where the cashiers know the post-tax amount of these items. It's possible to ring up the items so that they appear on a POS display, and then error-correct the check to remove them. A no-sale transaction opens the drawer so that the cashier can make change and track the cash received (which will then need to be skimmed from the shift's cash drop). This scam can often be identified through excessive use of the “no sale” or “drawer open” keys, excessive error-corrects or checks closed to \$0.



- The “**giveaway scam**” involves selling items for cash, where the items don’t require entry into the POS system. A great example of this is beer sales at a busy bar with a cash-paying clientele. When beverages are sold inclusive of tax, it’s easy for bartenders to do the math in their heads and to complete the sale without touching a POS unit at all. In combination with data from inventory control systems, the controller can measure the theoretical cost of goods (how much *should have been consumed* based on sales analysis from the POS system) with the actual cost of goods (how much product *was actually used*). This scam can often be identified when sales appear reduced, but inventory consumption does not.

This scenario requires data within the POS Message. *(This would require that each action is tracked back to the user applying the item.)*

3.13 RECONCILIATION BY DAY

The finance team would like to reconcile total transactions initiated in the POS with the transactions handled by the back-office accounting system and settlement with the payment processors and banks to ensure all POS transactions are settled in cash. The POS transaction amounts, currencies, and business dates will be consumed by the reconciliation process.

This scenario requires data within the POS Message. *(This will require external data about the deposit process.)*

3.14 GUEST SEGMENTATION FOR MARKETING

The spa manager, in conjunction with marketing, would like to do targeted promotions for their at-risk customers. To execute, they need to identify new versus returning customers, monitor the most frequent and most recent visitors and find out how much each customer is spending. The goal is to understand how much potential value each customer is to the business, and offer enough incentive to get them through the door. The analysis will require the spa transaction data and guest information, as well as other internal and external data sources to build profiles.

This scenario requires data within the POS Message. *(This analysis may require additional data sources for website actions, loyalty program data, etc.)*

3.15 SCHEDULING BASED ON FORECASTED VOLUME

An outlet manager wants to identify the peak sales period to optimize staffing by store based on an established labor standard. The manager will use transaction timestamps, volume, and sales over a time period, and combine this data with external data. The manager will then staff to ensure the right amount of people are scheduled to work during forecasted peak periods, and if a real time monitoring system is set up, the manager can adjust staffing levels as needed.

This scenario requires data within the POS Message. *(This analysis may require additional data on local events, weather, holidays or other external forces that influence transaction flows.)*



3.16 LABOR PRODUCTIVITY

As part of ongoing labor productivity efforts, the F&B manager would like to understand how bartenders across all outlets are performing. The manager would like to calculate a benchmark for each shift and each location, track how each bartender is performing compared to that benchmark and then stack-rank them by this standard. With that information, they will optimize shift assignments while HR can coordinate additional training for those who need it.

- Sales in relationship to:
 - Shift
 - Shift duration
 - Items
 - Outlets
 - Tip percentage as a ratio to sales
 - Total staff
 - Total customers
- Transaction:
 - Check duration
 - Price modifiers (discounts)
- Efficiency
 - Revenue per time period (e.g. per hour) check is open
 - Error on order, preparation or delivery of goods

This scenario requires data within the POS Message. *(This may require additional information from a staff management/HR system, as well as physical capacity information on the bar outlets.)*

3.17 SUPPLIER CHANGE IMPACT ON GUEST SATISFACTION

The operations team is trying to determine the effect of a new burger bun supplier on sales and customer satisfaction. To perform the analysis, the team first gathers POS transaction data, and uses the date that the new buns landed on the inventory list as a proxy for an outlet-specific start date. To analyze sales trends, volume and quality discounts before and after this date are compared and adjusted for seasonality. For customer satisfaction, the team is using the results of a blind taste test set up with random customers. They opted in but were not aware of which ingredient changed, and the item was paid for as if it was a normal purchase, but feedback was collected post-meal with a short survey. The analysis reveals that customers in the taste test rated the new bun significantly lower. Despite no significant difference in sales volume, quality discounts spiked. Based on this analysis, the team recommends the business goes back to the original burger bun supplier.

This scenario requires data within the POS Message. *(This scenario requires additional information from a survey.)*

3.18 PRICE CHANGE IMPACT ON GUEST SATISFACTION

The operations team has been charged with assessing the impact of some add-on price changes on guest satisfaction at a group of branded properties. Guests, when at the add-on/upsell stage of the



booking process online, were randomly presented with regular priced add-ons, or add-ons with a 20% price increase. Likewise, half the guests saw a price increase on the room service menu, and half of the retail outlets in the properties raised the price for retail transactions. For an initial analysis, the team looked at combined data from reservations, guest folios and POS transactions to identify trends between the groups. As expected, the number of guests who purchased these items decreased but the marginal revenue generated more than made up for it, combining for a 5% increase in revenue. However, management was unsure of the effect on guest satisfaction so they asked for additional analysis.

The team joined sentiment analysis data from the brand-wide reputation management system. The team could identify no correlation between pricing of these items and guest satisfaction. Because overall revenue was greater, they recommend to keep the price increases.

This scenario requires data within the POS transaction and PMS reservation messages. *(This scenario requires additional data from a reputation management tool and/or data from the PMS guest folio.)*

3.19 Productivity Analysis by Department, Task, Individual

The Guest Service Director wants to improve the efficiency of towel delivery to the rooms. The analytics team has been asked to produce a report showing the overall time from request to delivery for each towel request, as well as a breakdown of how much time is elapsed for each step along the way. Additionally, they're asked to provide averages for overall and for each step as well as a breakdown by hour of the day.

This scenario requires data within the Guest Request Message.

3.20 Frequency Analysis by Task and Source

As COVID has changed guest needs and the hotel's ability to deliver upon them specifically while reducing guest touch points without impacting guest satisfaction, the Rooms Director needs to see what the impact of the decision to increase the stock of coffee in the rooms and compare that to overall coffee costs per occupied room. Due to COVID, unopened coffee products can not be reused between guest stays.

To improve upon that plan, the Rooms Director would like to target specific customer types with increased coffee stock, while maintaining normal stock for other guest types. The analytics team has been tasked with producing a report of number of coffee requests by guest type, including time of day of the requests.

This scenario requires data within the Guest Request Messages as well as info from the Inventory and PMS systems..

3.21 Exception Analysis – Out of Norm

The regional manager for a group of hotels wants to compare guest satisfaction scores to her hotels' brand standard compliance. She does this on a monthly basis to work with the hotels to improve their scores. Additionally, she'll use this information to report to the home office on trends in her region. The data analytics organization has been tasked with preparing the monthly report in detail and the trend analysis report for the past 12 months to show improvement or decline in the compliance with standards.



This scenario requires data within the Guest Request Messages as well as guest satisfaction scores and brand standards data stored outside of the hotel systems.

3.22 Usage Analysis by Time of Day/Task/Source

The General Manager has noticed that many of the guest requests are opened and closed immediately thereafter. He knows this does not accurately reflect the time that the request delivery is taking. He wants to understand if the problem is with certain staff members, or if it's a systemic problem.

To achieve this he asks the analytics team to prepare a report detailing open and close times of the request as well as request type, department, staff member and time of day. He can then review the data with a focus on each area by filtering on the specific data points.

This scenario requires data within the Guest Request Messages.

3.23 Guest Satisfaction with Request

A hotel has great guest satisfaction scores, but the hotel manager believes they could still do better. In order to evaluate the guests level of satisfaction with guest requests, the manager pulls data to get a comprehensive view of the guests request data and the hotel's response to look at ways to improve the process. The hotel manager filters by guest type and request type to get a first impression and then filters further down by satisfaction score, for a full view.

This scenario requires data within the Guest Request Messages along with data from the reputation management system.

3.24 Request by Guest Type

Different guests have different preferences. Our hotel manager is trying to determine which requests are most common among particular guest segments. The analyst requires a full year of guest request data, as well as ancillary associated information that defines each segment from the CRM (e.g. age, business vs leisure, groups, geo, etc), and associated reservation data to include parameters like rate booked, source, booking window, etc. This data is then used to filter preferences by the various segments and to review the data in, for example, a pie chart for easier visibility.

This scenario requires data within the Guest Request Message as well as reservation data and guest data from the CRM for segmentation.

3.25 Event Analysis

An astute hotel manager has noticed that the volume of guest requests vary by type at different times. For example, heat waves seem to result in more 'extra towel' requests than normal, however the manager would like an analysis to confirm or reject this hypothesis. The analysis will need to establish baseline frequencies of each request type, and then identify periods where certain request types meaningfully deviates from its baseline. The hotel manager will then review the data to decide on staffing level, inventory levels and potentially frequency of assistance from third parties (laundry companies, etc).



This scenario requires data within the Guest Request Message, an events database, and a weather forecast database



4 MESSAGES

The following message examples are provided for guidance:

4.1 FINANCIAL TRANSACTIONS

A collection of individual transactions at the time of posting showing actual revenue.

Data Element Table

Element @Attribute	Card in-ality	XML Only	Data Type	Description/Contents
HTNG_FinancialTransactions NotifRQ			Root Element	A collection of individual transactions at the time of posting to show actual revenue
Transactions	1		Array	A collection of financial transactions
../Transaction	1..n	X	Object	A single financial transaction
../Transactions/NotificationType	1		String Enumeration	An enumerated list used to specify the type of transaction Available values: <ul style="list-style-type: none"> • New • Updated • Deleted
../Transactions/PropertyID	1		String	A unique ID for the property
../Transaction/CreatedDateTime	1		DateTime ISO 8601	The date and time that the transaction was created; formatted using ISO 8601
../Transaction/ModifiedDateTime	1		DateTime ISO 8601	The date and time that the transaction was last modified; formatted using ISO 8601
../Transaction/CreatedBy	0..1		String	The user or system who created the transaction
../Transaction/ModifiedBy	0..1		String	Identifies the user who last modified this transaction
../Transaction/TransactionID	1		String	A unique identifier for the transaction
../Transaction/TransactionType	1		String Enumeration	An enumerated list used to specify the type of transaction Available values:



				<ul style="list-style-type: none"> • Payment • Deposit • NonRevenue • Posting • Tax • PaidOut • AccountReceivable
../Transaction/TransactionDescription	1		String	A description of the transaction
../Transaction/TransactionCode	0..1		String	A custom code specifying the type of transaction
../Transaction/TransactionCodeGroup	1		String	Specifies the group for which the transaction applies
../Transaction/TransactionCodeRevenueType	1		String Enumeration	<p>An enumerated listed used to specify the revenue group for which the transaction code applies</p> <p>Available values:</p> <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Tax • Other
../Transaction/BusinessDate	1		Date	The business date on which this transaction took place. This may be different than the transaction date if the transaction was posted after midnight for a previous day's transaction. Formatting uses ISO 8601.
../Transaction/CurrencyCodeDetails	1		Object	The currency definition for the transaction
../CurrencyCodeDetails/Code	1		AlphaLength3	An ISO 4217 (3) alpha character code that specifies a monetary unit
../CurrencyCodeDetails/DecimalPlaces	1		NonNegativeInteger	The number of decimal places for the currency
../Transaction/Amount	0..1		Decimal	The total amount of the transaction
../Transaction/Quantity	0..1		Integer	The number of items related to the amount of the transaction
../Transaction/IsAdjustment	0..1		Boolean	When true, this transaction is an adjustment



../Transaction/AdjustmentReason	0..1		String	Describes the reason for adjustment
../Transaction/InvoiceNumber	0..1		String	Invoice number to which the transaction belongs
../Transaction/PaymentMethod	0..1		String Enumeration	An enumerated list that specifies the method of payment. This field is required if TransactionType is Payment. Available values are: <ul style="list-style-type: none"> • PaymentCard • BankCard • DirectBill • Voucher • LoyaltyRedemption • MiscChargeOrder • Ticket • Cash
../Transaction/POS_Details	0..1		Array	A collection of POS detail elements
../POSDetails/POS_Detail	1..n	X	Object	One POS element in the collection of POS elements; used to report the POS that recorded the transaction
../POSDetail/Code	1		String	An identifier of the POS system
../POSDetail/CheckID	0..1		String	An identifier of the POS check that the transaction belongs to
../POSDetail/TransactionID	0..1		String	An identifier for the POS transaction
../POSDetail/Covers	0..1		Integer	The number of covers assigned to the check that the transaction belongs to
../FinancialTransactions/Taxes	0..1	X	Array	A collection of taxes
../Taxes/Tax	1..n		Object	One tax item in a collection of tax items; specifies details of a tax for this transaction
../Taxes/Tax/Type	1		String	Specifies the type for the tax
../Taxes/Tax/Code	1		String	Specifies the tax code (e.g. 17%, VAT 17, VAT 3)
../Taxes/Tax/Amount	1		Decimal	The tax value



../Taxes/Tax/IsIncluded	1		Boolean	When true, this tax is included in the transaction amount
../FinancialTransactions/References	0..1	X	Array	A collection of references
../References/Reference	1..n		Object	Specifies the details of a reference in a collection of references
../Reference/Type	1		String Enum	An enumerated list used to specify the type of reference Available values: <ul style="list-style-type: none"> • ReservationID • GroupReservationID • RoomStayID • GuestID • SourceOfSaleID • FolioID • GroupFolioID
../Reference/ID	1		String	An identifier for the reference

4.1.1 GLOBAL SAMPLE MESSAGE: XML

The following is a sample Financial Transactions message in XML format:

```
<HTNG_FinancialTransactionsNotifRQ xsi:schemaLocation="http://htng.org/2019A
HTNG_FinancialTransactionsNotifRQ.xsd" xmlns="http://htng.org/2018B"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Transactions>
    <Transaction>
      <NotificationType>New</NotificationType>
      <PropertyID>1234543</PropertyID>
      <CreatedDateTime>2018-07-02T09:30:47Z</CreatedDateTime>
      <ModifiedDateTime>2018-07-02T09:30:47Z </ModifiedDateTime>
      <CreatedBy>user1</CreatedBy>
      <ModifiedBy>user2</ModifiedBy>
      <TransactionID>144674</TransactionID>
      <TransactionType>Posting</TransactionType>
      <TransactionDescription>Bar beverage</TransactionDescription>
      <TransactionCode>210</TransactionCode>
      <TransactionCodeGroup>2000</TransactionCodeGroup>
      <TransactionCodeRevenueType>FoodAndBeverage</TransactionCodeRevenueType>
      <BusinessDate>2018-07-02</BusinessDate>
      <CurrencyCodeDetails>
        <Code>EUR</Code>
        <DecimalPlaces>2</DecimalPlaces>
      </CurrencyCodeDetails>
    </Transaction>
  </Transactions>
</HTNG_FinancialTransactionsNotifRQ>
```

```
<Amount>19.00</Amount>
<Quantity>1</Quantity>
<IsAdjustment>>false</IsAdjustment>
<AdjustmentReason></AdjustmentReason>
<InvoiceNumber>487597565</InvoiceNumber>
<POS_Details>
  <POS_Detail>
    <Code>BAR</Code>
    <CheckID>98686765</CheckID>
    <TransactionID>9797065675</TransactionID>
    <Covers>1</Covers>
  </POS_Detail>
</POS_Details>
<Taxes>
  <Tax>
    <Type>VAT</Type>
    <Code>VAT 10%</Code>
    <Amount>1.90</Amount>
    <IsIncluded>>true</IsIncluded>
  </Tax>
</Taxes>
<References>
  <Reference>
    <Type>ReservationID</Type>
    <ID>4578995</ID>
  </Reference>
</References>
</Transaction>
</Transactions>
</HTNG_FinancialTransactionsNotifRQ>
```

4.1.2 GLOBAL SAMPLE MESSAGE: JSON

The following is a sample Financial Transactions message in JSON format:

```
{
  "FinancialTransactions" : [{
    "NotificationType" : "new",
    "PropertyID" : "1234543",
    "CreatedDateTime" : "2018-07-02T13:36:47.550+1:00",
    "ModifiedDateTime" : "2018-07-02T13:36:47.550+1:00",
    "CreatedBy" : "user1",
    "ModifiedBy" : "user2",
    "TransactionId" : "144674",
    "TransactionType" : "Posting",
    "TransactionDescription" : "Bar beverage",
    "TransactionCode" : "210",
    "TransactionCodeGroup" : "2000",
```



HTNG_ReservationDataNotif RQ	1		Root Element	A collection of reservation data presenting the actual, transactional state of the booking
Reservations	1		Array	A collection of reservations
../Reservation	1..n	X	Object	A single reservation in the collection of reservations
../Reservation/NotificationType	1		String Enumeration	An enumerated list to identify the type of notification being sent Available values: <ul style="list-style-type: none"> • New • Updated • Deleted
../Reservation/PropertyID	1		String	A unique ID for the property
../Reservation/ConfirmationID	1		String	The reservation confirmation ID
../Reservation/LegID	0..1		String	Identifies the sequence when multiple reservations share the same ID. This may be used in case of itenary travel or multiple room bookings under the same reservation/confirmation ID. Alternatively it is possible to add the sequence identifier as an appendix to the reservation/confirmation ID
../Reservation/ExternalReferences	0..1		Array	A collection of external references
./ ExternalReferences/ExternalReference	1..n	X	Object	An external reference is a means of identifying the reservation on other systems. For example, the reservation that initiates within an OTA and then is transferred to a CRS and finally to a PMS, it may have different references for each of these three systems.
./ ExternalReferences /ExternalReference/ID	1		String	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
./ ExternalReferences /ExternalReference/Name	1		String	Name of the external reference
./ ExternalReferences /ExternalReference/IsPointOf Sale	1		Boolean	When true, the external reference is the source of sale

../ ExternalReferences /ExternalReference/Type	0..1		String Enumeration	<p>Define the type of the profile if the external reference is a profile linked to the reservation.</p> <p>Available value:</p> <ul style="list-style-type: none"> • Customer • GDS • Corporation • TravelAgent • Wholesaler • Group • TourOperator • CRO • RepresentationCompany • InternetBroker • Airline • Hotel • CarRental • CruiseLine • Employee • EventHost • SupplierPartner • BillingContact • AuthorizedSigner • GeneralServiceContractor • Arranger • Association • TravelAgency
../ ExternalReferences /ExternalReference/ExternalReferenceReservationID	0..1		String	The key that can be used to retrieve the related record in the source system
../Reservation/Start	1		Date	The business arrival date for the reservation; formatted using ISO 8601
../Reservation/End	1		Date	The business departure date for the reservation; formatted using ISO 8601
../Reservation/Status	1		String Enumeration	<p>An enumerated list identifying the status of this reservation</p> <p>Available values:</p> <ul style="list-style-type: none"> • Reserved • Tentative • Optional

				<ul style="list-style-type: none"> Cancelled No-show Waitlisted In-house CheckedOut
../Reservation/CreatedDateTi me	1		DateTime ISO 8601	The date and time the reservation was created; formatted using ISO 8601
../Reservation/ModifiedDateTi me	1		DateTime	The date and time the reservation was last modified, if reservation has not been modified use date created; formatted using ISO 8601
../Reservation/CreatedBy	0..1		String	The user or system who created the reservation
../Reservation/ModifiedBy	0..1		String	The user or system who last modified the reservation
../Reservation/CancellationBu sinessDate	0..1		Date	The business date of the cancellation (this is not time zone sensitive); formatted using ISO 8601.
../Reservation/CancellationDa teTime	0..1		DateTime	The actual calendar cancellation date and time; formatted using ISO 8601
../Reservation/CancellationRe ason	0..1		String	Reason for the cancellation
../Reservation/OptionDate	0..1		DateTime	The date and time the reservation will be invalid if not confirmed; formatted using ISO 8601
../Reservation/Currency	1		Object	Provides a currency code and decimal places to reflect the currency in which an amount may be expressed
../ReservationTotal/Code	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../ReservationTotal/DecimalPI aces	1		Decimal	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../Reservation/BlockID	0..1		String	Associated block unique ID
../Reservation/Group	0..1		Object	Associated group details
../group/ID	1		String	Associated group unique ID; if the ID is unavailable, populate with the group name

../group/Code	0..1		String	Associated group short name/code
../group/Name	1		String	Associated group name; if group name is not available, populate with the group ID
../Reservation/ReservationTotal	1		Object	Reservation level rate, tax and fee details
../ReservationTotal/Amount	1		Decimal	The total amount of the reservation including additions, fees and taxes that are flagged as included
../ReservationTotal/Taxes	0..1		Array	A collection of taxes paid on the reservation
../Tax/Tax	1..n	X	Object	One tax item in the collection of taxes
../Tax/Type	1		String	Specifies the type for the tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		Decimal	The amount of the tax
../Tax/IsIncluded	1		Boolean	When true, this tax is included in the reservation total amount
../ReservationTotal/Fees	0..1		Array	A collection of fees paid on the reservation
../ FeeDetails /Fee	1..n	X	Object	One fee item in the collection of fees
../ FeeDetail/RevenueType	1		String Enumeration	Revenue type associated to the fee The available values are: <ul style="list-style-type: none"> • Accommodatiioin • FoodAndBeverage • Taxes • Other
../ FeeDetail/RevenueCode	0..1		String	Revenue code is a value associated to the fee and where it is handled in the chart of accounts
../ FeeDetail/Code	1		String	Identifies the fee (e.g. Resort)
../FeeDetail/Amount	1		Decimal	The amount of the fee
../ FeeDetail/IsIncluded	1		Boolean	When true, this fee is included in the reservation total amount
.../Reservations/RoomStays	1		Array	A collection of room stays
../RoomStays/RoomStay	1..n	X	Object	One room stay in the collection of room stays
../RoomStay/ID	1		String	A unique ID for this room stay

../RoomStay/CancellationBusinessDate	0..1		Date	The business date for the cancellation; formatted using ISO 8601
../RoomStay/CancellationDateTime	0..1		DateTime	The real date and time of the cancellation for this room stay; formatted using ISO 8601
../RoomStay/CancellationReason	0..1		String	Specifies the reason for the cancellation
../RoomStay/SharerIDs	0..1		Array	A collection of unique IDs identifying reservations allocated to the room
../SharerIDs/SharerID	1..n	X	String	Unique ID of additional reservation allocated to the room
../RoomStay/IsComplimentary	0..1		Boolean	When true, the room stay is complimentary
../RoomStay/IsHouseUse	0..1		Boolean	When true, the room stay is for house use
../RoomStay/Start	1		Date ISO 8601	Arrival date for the room stay (business date); formatted using ISO 8601
../RoomStay/EstimatedDateTimeOfArrival	0..1		DateTime ISO 8601	Estimated date and time of arrival formatted using ISO 8601
../RoomStay/ActualDateTimeOfArrival	0..1		DateTime ISO 8601	Actual date and time of arrival; formatted using ISO 8601
../RoomStay/End	1		Date ISO 8601	Departure date for the room stay (business date); formatted using ISO 8601
../RoomStay/EstimatedDateTimeOfDeparture	0..1		DateTime ISO 8601	Estimated date and time of departure; formatted using ISO 8601
../RoomStay/ActualDateTimeOfDeparture	0..1		DateTime ISO 8601	Actual date and time of departure; formatted using ISO 8601
../RoomStay/Status	1		String Enumeration	<p>An enumerated list describing the status of the room.</p> <p>The available options are:</p> <ul style="list-style-type: none"> • Reserved • Tentative • Optional • Cancelled • No-show • Waitlisted • In-house • CheckedOut



../RoomStay/Units	1		Array	A collection of the types of rooms and the dates they are reserved
../Units/Unit	1..n	X	Object	One unit in the collection of units
../Unit/Start	1		Date ISO 8601	The start date for the accommodation unit
../Unit/End	1		Date ISO 8601	The end date for the accommodation unit for which the values defined in the array apply For example, if the guest is arriving on the 1st and departing on the 3rd the end date is the 2nd, due to no values being applied to the checkout date
../Unit/ReservedUnitCount	1		Integer	Number of reserved units
../Unit/PhysicalUnitCount	0..1		Integer	Number of occupied units
../Unit/UnitType	1		String Enumeration	Specifies the type of unit The available values are: <ul style="list-style-type: none"> • SingleBedroom • DoubleBedroom • KingBedroom • QueenBedroom • TwinBedroom • TripleBedroom • QuadrupleBedroom • FamilyRoom • JuniorSuite • Suite • LargeSuite • Parlour • Apartment • Penthouse • Studio • Condo • Loft • Bungalow • Villa • Cottage • Cabin • Lodge • Tent



				<ul style="list-style-type: none"> • Dormitory • Bed • RunOfHouse • Room • ConnectedRoom • Virtual • RVSite • CampSite
../Unit/BookedRoomTypeCode	0..1		String	Booked room type code
../Unit/BookedRoomTypeName	1		String	Booked room type name
../Unit/BookedRoomCategoryCode	0..1		String	Booked room category code
../Unit/BookedRoomCategoryName	0..1		String	Booked room category name
../Unit/OccupiedRoomTypeCode	0..1		String	Occupied room type code Note: Occupied room type will default to the same as booked room type unless an alternate room type has been assigned
../Unit/OccupiedRoomTypeName	1		String	Occupied room type name Note: Occupied room type will default to the same as booked room type unless an alternate room type has been assigned
../Unit/OccupiedRoomCategoryCode	0..1		String	Occupied room category code
../Unit/OccupiedRoomCategoryName	1		String	Occupied room category name
../Unit/IsForecasted	1		Boolean	When true, indicates the units are forecasted and will be considered in the occupancy calculation
../Unit/RoomNumber	0..1		String	The room number of the unit
../Unit/ExtraBeds	0..1		Array	A collection of extra beds associated to the unit (e.g. rollaway beds, cribs)
../ExtraBeds/ExtraBed	1..n		Object	An extra bed type and quantity associated with this unit

../ExtraBed/Type	1		String Enumeration	The type of extra bed associated with this unit The available values are: <ul style="list-style-type: none"> • Rollaway • Crib
../ExtraBed/Count	1		Integer	The quantity of extra beds of the designated type
../RoomStay/Rates	1		Array	A collection of rates for all rate plans in the room stay
../Rates/Rate	1..n	X	Object	One rate item in the collection of rates
../Rate/Start	1		Date	The start date of the stay in this room type (business date); formatted using ISO 8601
../Rate/End	1		Date	The end date of the stay in this room type (business date); formatted using ISO 8601
../Rate/RatePlanCode	1		String	Rate plan reference code from the collection of rate plans
../Rate/RateDetails	1		Array	A collection of pricing and revenue details for the rate
../RateDetails/RateDetail	1..n	X	Object	One pricing and revenue details item for the rate in the collection
../RateDetail/RevenueType	1		String Enumeration	An enumerated list that specifies the revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Taxes • Other
../RateDetail/RevenueCode	1		String	Revenue code associated to the rate
../RateDetail/Amount	1		Decimal	The amount allocated to the revenue code
../RateDetail/Taxes	1		Array	A collection of taxes.
../Taxes/Tax	1	X	Object	One tax item in a collection of taxes
../Tax/Type	1		String	Specifies the type for the tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		Decimal	Amount of the tax
../Tax/IsIncluded	1		Boolean	When true, this tax is included in the rate amount
../RoomStay/Fees	0..1		Array	A collection of fees for the room stay



../Fees/Fee	1..n	X	Object	One fee item in the collection of fee items
../Fee/Start	1		Date	Start date for when the fees apply (business date); formatted using ISO 8601
../Fee/End	1		Date	End date for when the fees applies (business date); formatted using ISO 8601
../Fee/FeeDetails	1		Array	A collection of fee details for the specified date range
../FeeDetails/FeeDetail	1..n	X	Object	One fee detail item in the collection of fee detail items
../FeeDetail/RevenueType	1		String Enumeration	An enumerated list that specifies the revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Taxes • Other
../FeeDetail/RevenueCode	1		String	Revenue code associated to the fee
../FeeDetail/Code	1		String	Identifies the fee
../FeeDetail/Amount	1		Decimal	Amount for the fee
../FeeDetail/IsIncluded	1		Boolean	When true, this fee is included in the rate amount
../ FeeDetail/Taxes	0..1		Array	A collection of taxes
../Taxes/Tax	1..n	X	Object	One tax item in a collection of taxes
../Tax/Type	1		String	Specifies the type for the tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		Decimal	Amount of the tax
../Tax/IsIncluded	1		Boolean	When true, this tax included in the rate amount
../RoomStay/RatePlans	1		Array	A collection of rate plans in the reservation
../RatePlans/RatePlan	1..n	X	Object	One rate plan item in the collection of rate plans
../RatePlan/Code	1		String	The rate plan code or short name
../RatePlan/Name	1		String	The name of the rate plan
../RatePlan/Description	0..1		String	Description of the rate plan
../RatePlan/CategoryCode	0..1		String	Rate plan category short name



../RatePlan/CategoryName	0..1		String	Rate plan category long name
../RoomStay/Segmentation	0..1		Object	The business segmentation description of the reservation
../Segmentation/Markets	0..1		Object	A collection of market segment items
../Markets/Market	1..n	X	Object	One market item in the collection of markets items
../Market/Start	1		Date	The start business date for which the values defined in the collection applies; formatted using ISO 8601
../Market/End	1		Date	The end business date for which the values defined in the collection applies; formatted using ISO 8601
../Market/Code	0..1		String	The market segment short name
../Market/Name	1		String	The market segment long name
../Market/CategoryCode	0..1		String	The market category short name
../Market/CategoryName	0..1		String	The market category long name
../Segmentation/Sources	0..1		Array	A collection of sources
../Sources/Source	1..n	X	Object	One source item in the collection of sources
../Source/Start	1		Date	The start business date for which the values defined in the collection applies; formatted using ISO 8601
../Source/End	1		Date	The end business date for which the values defined in the collection applies; formatted using ISO 8601
../Source/Code	0..1		String	The short name
../Source/Name	1		String	The long name
../Source/CategoryCode	0..1		String	The source category short name
../Source/CategoryName	0..1		String	The source category long name
../Segmentation/Origins	0..1		Array	A collection of origins
../Origins/Origin	1..n	X	Object	One origin item in the collection of origins
../Origin/Start	1		Date	The start business date range for which the values defined in the collection applies; formatted using ISO 8601
../Origin/End	1		Date	The end business date range for which the values defined in the collection applies; formatted using ISO 8601
../Origin/Code	0..1		String	The short name

../Origin/Name	1		String	The long name
../Origin/CategoryCode	0..1		String	The origin category short name
../Origin/CategoryName	0..1		String	The origin category long name
../RoomStay/OccupancyDetails	0..1		Array	A collection of occupancy details
../OccupancyDetails/OccupancyDetail	1..n	X	Object	One occupancy item in the collection of occupancy details
../OccupancyDetail/Start	1		Date	The start business date for which the values defined in the collection applies; formatted using ISO 8601
../OccupancyDetail/End	1		Date	The end business date for which the values defined in the collection applies; formatted using ISO 8601
../OccupancyDetail/IsPerUnit	1		Boolean	When true, the occupancy applies for each unit in the reservation
../OccupancyDetail/Occupants	1		Array	A collection of occupants and their age classifications for the room stay
../Occupants/Occupant	1..n	X	Object	One or more occupants of the specified type
../Occupant/Count	1		Integer	Number of occupants of this age type
../Occupant/AgeQualifyingCode	1		String Enumeration	An enumerated list that specifies the type of occupant The available values are: <ul style="list-style-type: none"> • Adult • Child • Infant • Senior
../Occupant/Age	0..1		Integer	Age of the occupant
../RoomStay/Guests	0..1		Array	A collection of guest details
../Guests/Guest	1..n	X	Object	An individual guest in the collection of guests
../Guest/ID	1		String	A unique guest ID
../Guest/IsPrimary	1		Boolean	When true, this guest is the primary guest
../Guest/CountryOfResidence	0..1		String ISO Code 3166	The country of residence - ISO Code 3166 Alpha 2
../Guest/Nationality	0..1		String ISO Code 3166	Nationality - ISO Code 3166 Alpha 2
../Guest/VIPLevelCode	0..1		String	The code identifying the guest VIP level

../Guest/LoyaltyDetails	0..1		Array	A collection of loyalty information
../LoyaltyDetails/LoyaltyDetail	1..n	X	Object	One loyalty detail item in a collection of loyalty details
../LoyaltyDetail/ProgramCode	1		String	A code identifying the loyalty program
../LoyaltyDetail/ProgramType	0..1		String Enumeration	An enumerated list identifying the type of the loyalty program Available values: <ul style="list-style-type: none"> • Airline • Hotel • Independent • OnlineTravelAgency • Other
../LoyaltyDetail/LevelCode	0..1		String	The code identifying the guest loyalty level
../RoomStay/SpecialRequests	0..1		Array	A collection of guest requests
../SpecialRequests/SpecialRequest	1..n	X	object	One guest request in the collection of guest requests
../SpecialRequest/ID	0..1		string	Unique Id of the special request
../SpecialRequest/Code	0..1		string	Code or short name of the request
../SpecialRequest/Name	1		string	Long name of the request
../RoomStay/RoomAddOns	0..1		Array	A collection of addons to the room stay; add-ons are by default included in the rate
../RoomAddOns/RoomAddOn	1..n	X	object	One add-on item in the collection of add on items
../RoomAddOn/Start	1		date	The start business date for which the values defined in the collection applies
../RoomAddOn/End	1		date	The end business date for which the values defined in the collection applies
../RoomAddOn/Code	1		string	The code identifying the type of the add on
../RoomAddOn/Description	0..1		string	The description of the add on
../RoomAddOn/RateCode	1		string	The rate code the add on is linked to
../RoomAddOn/Quantity	1		integer	The quantity of the add on item
../RoomAddOn/UnitPricings	1		Array	A collection of price details of the add on per quantity
../UnitPricings/UnitPricing	1..n	X	object	One unit pricing in the collection of unit pricings

../UnitPricing/RevenueType	1		string enumeration	An enumerated list identifying the revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Taxes • Other
../UnitPricing/RevenueCode	1		string	The revenue code for the price item
../UnitPricing/Amount	1		decimal	Amount of the price item
../UnitPricing/Taxes	1		Array	A collection of taxes
../Taxes/Tax	1	X	object	One tax in the collection of taxes
../Tax/Type	1		string	Type of the tax
../Tax/Code	1		string	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		decimal	Amount of the tax
../Tax/IsIncluded	1		boolean	When true, this tax is included in the unit price
../RoomStay/Additions	0..1		Array	A collection of additions purchased with the reservation that are not included in the rate code
../Additions/Addition	1..n	X	object	One additional purchase item in the collection of additions
../Addition/Start	1		date	The start business date for which the values defined in the collection applies
../Addition/End	1		date	The end business date for which the values defined in the collection applies
../Addition/Code	1		string	The code identifying the item
../Addition/Description	0..1		string	A short description of the item
../Addition/RateCode	1		string	The rate code the item belongs to
../Addition/Quantity	1		integer	The quantity purchased
../Addition/UnitPricing	1		Array	A collection of price details of the add on per quantity
../UnitPricing/UnitPricing	1	X	object	One-unit pricing in the collection of unit pricings
../UnitPricing/RevenueType	1		string enumeration	The revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage



				<ul style="list-style-type: none"> • Taxes • Other
../UnitPricing/RevenueCode	1		string	The revenue code for the price item
../UnitPricing/Amount	1		decimal	Amount of the price item
../UnitPricing/Taxes	1		Array	A collection of taxes
../Taxes/Tax	1	X	object	One tax in the collection of taxes
../Tax/Type	1		string	Type of the tax
../Tax/Code	1		string	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		decimal	Amount of the tax
../Tax/IsIncluded	1		boolean	When true, this tax is included in the unit price.
../RoomStay/Commissions	0..1		array	A collection of commission items that apply to this room stay
../Commissions/Commission	1..n	X	object	Commission associated with the RoomStay; this can be a percentage or a flat amount
../Commission/Start	1		date	The start date for the commission, formatted using ISO 8601
../Commission/End	1		date	The end date for the commission, formatted using ISO 8601
../Commission/RefID	0..1		string	Identifies the recipient of the commission
../Commission/CommissionableAmount	0..1		object	The amount on which commission is calculated
../CommissionableAmount/Amount	1		decimal	The amount on which commission is calculated
../CommissionableAmount/TaxInclusiveIndicator	0..1		boolean	When true, indicates that the commission is calculated using the rate including tax When false, indicates that the commission is calculated using the net rate
../Commission/Percent	0..1		Percentage	The percent applied to the commissionable amount to determine the commission payable amount
../Commission/FlatCommissionAmount	0..1		decimal	The amount of the fixed commission
../Commission/CommissionPayableAmount	0..1		decimal	The amount of commission paid

Global Sample Message – Request



Global Sample Message – Response

4.2.1 Global Sample Message: XML

The following is a sample Reservations message in XML format:

```
<HTNG_ReservationDataNotifRQ xsi:schemaLocation="http://htng.org/2019A
HTNG_ReservationDataNotifRQ.xsd" xmlns="http://htng.org/2018B"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Reservations>
    <Reservation>
      <NotificationType>New</NotificationType>
      <PropertyID>1234543</PropertyID>
      <ReservationID>4578995</ReservationID>
      <ConfirmationID>RES-100000</ConfirmationID>
      <LegID>1</LegID>
      <ExternalReferences>
        <ExternalReference>
          <ID>17644897</ID>
          <Name>ARTE Travel</Name>
          <IsPointOfSale>true</IsPointOfSale>
          <Type>TravelAgent</Type>
          <ExternalReferenceReservationID></ExternalReferenceReservationID>
        </ExternalReference>
      </ExternalReferences>
      <Start>2018-07-01</Start>
      <End>2018-07-07</End>
      <Status>Reserved</Status>
      <CreatedDateTime>2017-12-01T09:30:47Z</CreatedDateTime>
      <ModifiedDateTime>2017-12-01T09:30:47Z</ModifiedDateTime>
      <CreatedBy>user 1</CreatedBy>
      <ModifiedBy>user 2</ModifiedBy>
      <Currency>
        <Code>EUR</Code>
        <DecimalPlaces>2</DecimalPlaces>
      </Currency>
      <BlockID></BlockID>
      <Group>
        <ID>896796969</ID>
        <Code></Code>
        <Name></Name>
      </Group>
      <ReservationTotal>
        <Amount>963.00</Amount>
        <Taxes>
          <Tax>
            <Type>VAT</Type>
            <Code>VAT 10%</Code>
            <Amount>96.00</Amount>
          </Tax>
        </Taxes>
      </ReservationTotal>
    </Reservation>
  </Reservations>
</HTNG_ReservationDataNotifRQ>
```



```
        <IsIncluded>true</IsIncluded>
      </Tax>
    </Taxes>
    <Fees>
      <Fee>
        <RevenueType>Taxes</RevenueType>
        <RevenueCode>Other Taxes</RevenueCode>
        <Code>City tax</Code>
        <Amount>3.00</Amount>
        <IsIncluded>true</IsIncluded>
      </Fee>
    </Fees>
  </ReservationTotal>
  <RoomStays>
    <RoomStay>
      <ID>4578995-1</ID>
      <SharerIDs>
        <SharerID>123445</SharerID>
      </SharerIDs>
      <IsComplimentary>>false</IsComplimentary>
      <IsHouseUse>>false</IsHouseUse>
      <Start>2018-07-01</Start>
      <EstimatedDateTimeOfArrival>2018-07-01T09:30:47Z</EstimatedDateTimeOfArrival>
      <ActualDateTimeOfArrival>2018-07-01T10:30:47Z</ActualDateTimeOfArrival>
      <End>2018-07-07</End>
      <EstimatedDateTimeOfDeparture>2018-07-
07T09:30:47Z</EstimatedDateTimeOfDeparture>
      <ActualDateTimeOfDeparture>2018-07-07T09:30:47Z</ActualDateTimeOfDeparture>
      <Status>CheckedOut</Status>
      <Units>
        <Unit>
          <Start>2018-07-01</Start>
          <End>2018-07-03</End>
          <ReservedUnitCount>1</ReservedUnitCount>
          <PhysicalUnitCount>1</PhysicalUnitCount>
          <UnitType>Room</UnitType>
          <BookedRoomTypeCode>STE</BookedRoomTypeCode>
          <BookedRoomTypeName>Suite</BookedRoomTypeName>
          <BookedRoomCategoryCode>SUP</BookedRoomCategoryCode>
          <BookedRoomCategoryName>Superior</BookedRoomCategoryName>
          <OccupiedRoomTypeCode>STE</OccupiedRoomTypeCode>
          <OccupiedRoomTypeName>Suite</OccupiedRoomTypeName>
          <OccupiedRoomCategoryCode>SUP</OccupiedRoomCategoryCode>
          <OccupiedRoomCategoryName>Superior</OccupiedRoomCategoryName>
          <IsForecasted>true</IsForecasted>
          <RoomNumber>15</RoomNumber>
          <ExtraBeds>
            <ExtraBed>
              <Type>Rollaway</Type>
            </ExtraBed>
          </ExtraBeds>
        </Unit>
      </Units>
    </RoomStay>
  </RoomStays>
</ReservationTotal>
```



```
        <Count>1</Count>
      </ExtraBed>
    </ExtraBeds>
  </Unit>
  <Unit>
    <Start>2018-07-04</Start>
    <End>2018-07-06</End>
    <ReservedUnitCount>1</ReservedUnitCount>
    <PhysicalUnitCount>1</PhysicalUnitCount>
    <UnitType>Room</UnitType>
    <BookedRoomTypeCode>STE</BookedRoomTypeCode>
    <BookedRoomTypeName>Suite</BookedRoomTypeName>
    <BookedRoomCategoryCode>SUP</BookedRoomCategoryCode>
    <BookedRoomCategoryName>Superior</BookedRoomCategoryName>
    <OccupiedRoomTypeCode>STE</OccupiedRoomTypeCode>
    <OccupiedRoomTypeName>Suite</OccupiedRoomTypeName>
    <OccupiedRoomCategoryCode>SUP</OccupiedRoomCategoryCode>
    <OccupiedRoomCategoryName>Superior</OccupiedRoomCategoryName>
    <IsForcasted>true</IsForcasted>
    <RoomNumber>20</RoomNumber>
  <ExtraBeds>
    <ExtraBed>
      <Type>Rollaway</Type>
      <Count>1</Count>
    </ExtraBed>
  </ExtraBeds>
</Unit>
</Units>
<Rates>
  <Rate>
    <Start>2018-07-01</Start>
    <End>2018-07-03</End>
    <RatePlanCode>HOL</RatePlanCode>
    <RateDetails>
      <RateDetail>
        <RevenueType>Accommodation</RevenueType>
        <RevenueCode>Rooms</RevenueCode>
        <Amount>120.00</Amount>
        <Taxes>
          <Tax>
            <Type>VAT</Type>
            <Code>VAT 10%</Code>
            <Amount>12.00</Amount>
            <IsIncluded>true</IsIncluded>
          </Tax>
        </Taxes>
      </RateDetail>
      <RateDetail>
        <RevenueType>FoodAndBeverage</RevenueType>
```




```
<RevenueCode>Breakfast</RevenueCode>
<Amount>20.00</Amount>
<Taxes>
  <Tax>
    <Type>VAT</Type>
    <Code>VAT 10%</Code>
    <Amount>2.00</Amount>
    <IsIncluded>>true</IsIncluded>
  </Tax>
</Taxes>
</RateDetail>
</RateDetails>
</Rate>
<Rate>
  <Start>2018-07-04</Start>
  <End>2018-07-06</End>
  <RatePlanCode>HOL</RatePlanCode>
  <RateDetails>
    <RateDetail>
      <RevenueType>Accommodation</RevenueType>
      <RevenueCode>Rooms</RevenueCode>
      <Amount>160.00</Amount>
      <Taxes>
        <Tax>
          <Type>VAT</Type>
          <Code>VAT 10%</Code>
          <Amount>16.00</Amount>
          <IsIncluded>>true</IsIncluded>
        </Tax>
      </Taxes>
    </RateDetail>
    <RateDetail>
      <RevenueType>FoodAndBeverage</RevenueType>
      <RevenueCode>Breakfast</RevenueCode>
      <Amount>20.00</Amount>
      <Taxes>
        <Tax>
          <Type>VAT</Type>
          <Code>VAT 10%</Code>
          <Amount>2.00</Amount>
          <IsIncluded>>true</IsIncluded>
        </Tax>
      </Taxes>
    </RateDetail>
  </RateDetails>
</Rate>
</Rates>
<Fees>
  <Fee>
```




```
        <CategoryCode>TP</CategoryCode>
        <CategoryName>Third Party</CategoryName>
    </Origin>
</Origins>
</Segmentation>
<OccupancyDetails>
    <OccupancyDetail>
        <Start>2018-07-01</Start>
        <End>2018-07-06</End>
        <IsPerUnit>>true</IsPerUnit>
        <Occupants>
            <Occupant>
                <Count>2</Count>
                <AgeQualifyingCode>Adult</AgeQualifyingCode>
            </Occupant>
        </Occupants>
    </OccupancyDetail>
</OccupancyDetails>
<Guests>
    <Guest>
        <ID>GUEST-100000</ID>
        <IsPrimary>>true</IsPrimary>
        <CountryOfResidence>DE</CountryOfResidence>
        <Nationality>US</Nationality>
        <LoyaltyDetails>
            <LoyaltyDetail>
                <ProgramCode>ALP</ProgramCode>
                <ProgramType>Other</ProgramType>
                <LevelCode>ALP-123424-PO</LevelCode>
            </LoyaltyDetail>
        </LoyaltyDetails>
    </Guest>
</Guests>
<SpecialRequests>
    <SpecialRequest>
        <ID>708708</ID>
        <Code>X-P</Code>
        <Name>Extra Pillow</Name>
    </SpecialRequest>
</SpecialRequests>
<RoomAddOns>
    <RoomAddOn>
        <Start>2018-07-01</Start>
        <End>2018-07-06</End>
        <Code>BRK BT</Code>
        <Description>Breakfast Buffet</Description>
        <RateCode>HOL</RateCode>
        <Quantity>2</Quantity>
        <UnitPricings>
```



```
<UnitPricing>
  <RevenueType>FoodAndBeverage</RevenueType>
  <RevenueCode>Breakfast</RevenueCode>
  <Amount>10.00</Amount>
  <Taxes>
    <Tax>
      <Type>VAT</Type>
      <Code>VAT 10%</Code>
      <Amount>1.00</Amount>
      <IsIncluded>>true</IsIncluded>
    </Tax>
  </Taxes>
  <ChargeUnit>Per person per night</ChargeUnit>
</UnitPricing>
</UnitPricings>
</RoomAddOn>
</RoomAddOns>
<Additions>
  <Addition>
    <Start>2018-07-01</Start>
    <End>2018-07-06</End>
    <Code>Ticket PP</Code>
    <Description>Ticket Pool Party</Description>
    <RateCode>HOL</RateCode>
    <Quantity>2</Quantity>
    <UnitPricings>
      <UnitPricing>
        <RevenueType>FoodAndBeverage</RevenueType>
        <RevenueCode>Bar</RevenueCode>
        <Amount>50.00</Amount>
        <Taxes>
          <Tax>
            <Type>VAT</Type>
            <Code>VAT 10%</Code>
            <Amount>5.00</Amount>
            <IsIncluded>>true</IsIncluded>
          </Tax>
        </Taxes>
        <ChargeUnit>Per person per night</ChargeUnit>
      </UnitPricing>
    </UnitPricings>
    <UnitPricing>
      <RevenueType>Other</RevenueType>
      <RevenueCode>DJ</RevenueCode>
      <Amount>10.00</Amount>
      <Taxes>
        <Tax>
          <Type>VAT</Type>
          <Code>VAT 10%</Code>
          <Amount>1.00</Amount>
        </Tax>
      </Taxes>
    </UnitPricing>
  </Addition>
</Additions>
```



```
        <IsIncluded>true</IsIncluded>
      </Tax>
    </Taxes>
    <ChargeUnit>Per person per stay</ChargeUnit>
  </UnitPricing>
</UnitPricings>
</Addition>
</Additions>
<Commissions>
  <Commission>
    <Start>22018-07-01</Start>
    <End>22018-07-06</End>
    <RefID>12G</RefID>
    <CommissionableAmount>
      <Amount>960.00</Amount>
      <TaxInclusiveIndicator>true</TaxInclusiveIndicator>
    </CommissionableAmount>
    <Percent>12</Percent>
  </Commission>
</Commissions>
</RoomStay>
</RoomStays>
</Reservation>
</Reservations>
</HTNG_ReservationDataNotifRQ>
```

4.2.2 Global Sample Message: JSON

The following is a sample Reservation message in JSON format:

```
{
  "Reservations" : [{
    "NotificationType" : "New",
    "PropertyID" : "1234543",
    "ReservationID" : "4578995",
    "ConfirmationID" : "RES-100000",
    "LegID" : "1",
    "ExternalReferences" : [{
      "ID" : "17644897",
      "Name" : "ARTE Travel",
      "IsPointOfSale" : true,
```



```
        "Type" : "TravelAgent",
        "ExternalReferenceReservationId" : null

    }
],
"Start" : "2018-07-01",
"End" : "2018-07-07",
"Status" : "Reserved",
"CreatedDateTime" : "2017-12-01T13:36:47.550+1:00",
"ModifiedDateTime" : "2017-12-01T13:36:47.550+1:00",
"CreatedBy" : "User 1",
"ModifiedBy" : "User 2",
"CancellationBusinessDate" : null,
"CancellationDateTime" : null,
"CancellationReason" : null,
"OptionDate" : null,
"Currency" : {
    "Code" : "EUR",
    "DecimalPlaces" : 2
},
"BlockID" : "896796969",
"Group" : {
    "ID" : "",
    "Code" : "",
    "Name" : ""
},

"ReservationTotal" : {
    "Amount" : 963.00,

    "Taxes" : [{
        "Type" : "VAT",
```



```
        "Code" : "VAT 10%",
        "Amount" : 96.00,
        "IsIncluded" : true
    }
],
"Fees" : [{
    "RevenueType" : "Taxes",
    "RevenueCode" : "Other Taxes",
    "Code" : "City tax",
    "Amount" : 3.00,
    "IsIncluded" : true
}
]
},
"RoomStays" : [{
    "ID" : "4578995-1",
    "CancellationBusinessDate" : null,
    "CancellationDateTime" : null,
    "CancellationReason" : null,
    "SharerIDs" : [{
        "SharerID" : "123445"
    }
],
    "IsComplimentary" : false,
    "IsHouseUse" : false,
    "Start" : "2018-07-01",
    "EstimatedDateTimeOfArrival" : "2018-07-01T11:00:00.000+1:00",
    "ActualDateTimeOfArrival" : "2018-07-01T10:00:00.000+1:00",
    "End" : "2018-07-07",
    "EstimatedDateTimeOfDeparture" : "2018-07-07T13:00:00.000+1:00",
    "ActualDateTimeOfDeparture" : "2018-07-07T12:00:00.000+1:00",
    "Status" : "CheckedOut",
```



```
"Units" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-03",
  "ReservedUnitCount" : 1,
  "PhysicalUnitCount" : 1,
  "UnitType" : "Room",
  "BookedRoomTypeCode" : "DBL",
  "BookedRoomTypeName" : "Double",
  "BookedRoomCategoryCode" : "SUP",
  "BookedRoomCategoryName" : "Superior",
  "OccupiedRoomTypeCode" : "DBL",
  "OccupiedRoomTypeName" : "Double",
  "OccupiedRoomCategoryCode" : "SUP",
  "OccupiedRoomCategoryName" : "Superior",
  "IsForecasted" : true,
  "RoomNumber" : "15",
  "ExtraBeds" : [{
    "Type" : "Rollaway",
    "Count" : 1
  }
]
}, {
  "Start" : "2018-07-04",
  "End" : "2019-07-06",
  "ReservedUnitCount" : 1,
  "PhysicalUnitCount" : 1,
  "UnitType" : "Room",
  "BookedRoomTypeCode" : "STE",
  "BookedRoomTypeName" : "Suite",
  "BookedRoomCategoryCode" : "SUP",
  "BookedRoomCategoryName" : "Superior",
  "OccupiedRoomTypeCode" : "STE",
```




```
"OccupiedRoomTypeName" : "Suite",
"OccupiedRoomCategoryCode" : "SUP",
"OccupiedRoomCategoryName" : "Superior",
"IsForecasted" : true,
"RoomNumber" : "20",
"ExtraBeds" : [{
  "Type" : "Rollaway",
  "Count" : 1
}]
},
"Rates" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-03",
  "RatePlanCode" : "HOL",
  "RateDetails" : [{
    "RevenueType" : "Accommodation",
    "RevenueCode" : "Rooms",
    "Amount" : 120.00,
    "Taxes" : [{
      "Type" : "VAT",
      "Code" : "VAT 10%",
      "Amount" : 12.00,
      "IsIncluded" : true
    }]
  }]
}, {
  "RevenueType" : "FoodAndBeverage",
  "RevenueCode" : "Breakfast",
  "Amount" : 20.00,
  "Taxes" : [{
```



```
        "Type" : "VAT",
        "Code" : "VAT 10%",
        "Amount" : 2.00,
        "IsIncluded" : true
    }
  ]
}
], {
  "Start" : "2018-07-04",
  "End" : "2019-07-06",
  "RatePlanCode" : "HOL",
  "RateDetails" : [{
    "RevenueType" : "Accommodation",
    "RevenueCode" : "Rooms",
    "Amount" : 160.00,
    "Taxes" : [{
      "Type" : "VAT",
      "Code" : "VAT 10%",
      "Amount" : 16.00,
      "IsIncluded" : true
    }
  ]
}, {
  "RevenueType" : "Food&Beverage",
  "RevenueCode" : "Breakfast",
  "Amount" : 20.00,
  "Taxes" : [{
    "Type" : "VAT",
    "Code" : "VAT 10%",
    "Amount" : 2.00,
    "IsIncluded" : true
```



```
        }
      ]
    }

  ]
}

],
"Fees" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-01",
  "feeDetails" : [{
    "RevenueType" : "Taxes",
    "RevenueCode" : "Other Taxes",
    "Code" : "City tax",
    "Amount" : 3.00,
    "IsIncluded" : false
  }
]
}
],

"RatePlans" : [{
  "Code" : "HOL",
  "Name" : "Holidays",
  "Description" : "Holidays offer 2018",
  "CategoryCode" : "OF18",
  "CategoryName" : "Offer 2018"
}
],

"Segementation" : {
```



```
"Markets" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-06",
  "Code" : "INDLEI",
  "Name" : "Individual Leisure",
  "CategoryCode" : "IND",
  "CategoryName" : "Individual"
}
],
"Sources" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-06",
  "Code" : "OTA",
  "Name" : "Online Travel Agent",
  "CategoryCode" : "TA",
  "CategoryName" : "Travel Agent"
}
],
"Origins" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-06",
  "Code" : "CRS",
  "Name" : "Central Reservation System",
  "CategoryCode" : "DIST",
  "CategoryName" : "Distribution"
}
]
},
"OccupancyDetails" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-06",
```



```
        "IsPerUnit" : true,
        "Occupants" : [{
            "Count" : 2,
            "Age" : null,
            "AgeQualifyingCode" : "Adult"
        }
    ]
}
],
"Guests" : [{
    "ID" : "GUEST-100000",
    "IsPrimary" : true,
    "CountryOfResidence" : "DE",
    "Nationality" : "US",
    "VIPLevelCode" : null,
    "LoyaltyDetails" : [{
        "ProgramCode" : "ALP",
        "ProgramType" : "Other",
        "LevelCode" : "ALP-123424-PO"
    }
    ]
}
],
"SpecialRequests" : [{
    "ID" : "708708",
    "Code" : "X-P",
    "Name" : "Extra Pillow"
}
],
"RoomAddons" : [{
```



```
"Start" : "2018-07-01",  
"End" : "2018-07-06",  
"Code" : "BRK BT",  
"Description" : "Breakfast Buffet",  
"RateCode" : "HOL",  
"Quantity" : 2,  
"UnitPricings" : [{  
  "RevenueType" : "FoodAndBeverage",  
  "RevenueCode" : "Breakfast",  
  "Amount" : 10.00,  
  "Taxes" : [{  
    "Type" : "VAT",  
    "Code" : "VAT 10%",  
    "Amount" : 1.00,  
    "IsIncluded" : true  
  }  
]  
}]  
],
```

```
"Additions" : [{  
  "Start" : "2018-07-01",  
  "End" : "2018-07-01",  
  "Code" : "Ticket PP",  
  "Description" : "Ticket Pool Party",  
  "RateCode" : "HOL",  
  "Quantity" : 2,  
  "UnitPricings" : [{  
    "RevenueType" : "FoodAndBeverage",  
    "RevenueCode" : "Bar",
```



```
        "Amount" : 50.00,  
        "Taxes" : [{  
            "Type" : "VAT",  
            "Code" : "VAT 10%",  
            "Amount" : 5.00,  
            "IsIncluded" : true  
        }  
    ]  
  
    }, {  
        "RevenueType" : "Others",  
        "RevenueCode" : "Dj",  
        "Amount" : 10.00,  
        "Taxes" : [{  
            "Type" : "VAT",  
            "Code" : "VAT 10%",  
            "Amount" : 1.00,  
            "IsIncluded" : true  
        }  
    ]  
    }  
]  
  
    ],  
    "Commissions" : [{  
        "Start" : "2018-07-01",  
        "End" : "2018-07-06",  
        "RefID" : "12G",  
        "CommissionableAmount" : {  
            "Amount" : 960.00,  
            "TaxInclusiveIndicator" : true,  
            "Percent" : 12,
```



../ExternalReferences/ExternalReference	1..n	X	Object	<p>An external reference is a means of identifying the reservation on other systems</p> <p>For example, the reservation that initiates within an OTA and then is transferred to a CRS and finally to a PMS, may have different references for each of these three systems</p>
../ExternalReference/ID	1		String	<p>A string that uniquely identifies the system that uses the reference</p> <p>For example, the specific OTA</p>
../ExternalReference/Name	1		String	Name of the external reference
../ExternalReference/IsPointOfSale	1		Boolean	When true, the external reference is the source of sale
../ExternalReference/Type	0..1		String Enumeration	<p>Define the type of the profile if the external reference is a profile linked to the reservation</p> <p>Available value:</p> <ul style="list-style-type: none"> • Customer • GDS • Corporation • TravelAgent • Wholesaler • Group • TourOperator • CRO • RepresentationCompany • InternetBroker • Airline • Hotel • CarRental • CruiseLine • Employee • EventHost • SupplierPartner • BillingContact • AuthorizedSigner • GeneralServiceContractor • Arranger

				<ul style="list-style-type: none"> • Association • TravelAgency
../ExternalReference/BlockID	0..1		String	The key that can be used to retrieve the related record in the source system
../Block/Code	0..1		String	A code that identifies the block
../Block/Name	1		String	The name of the block
../Block/Type	1		String Enumeration	<p>An enumerated list used to specify the type of block:</p> <ul style="list-style-type: none"> • Block • Allotment • Group
../Block/Status	1		String Enumeration	<p>An enumerated list used to specify the status of the block; effects on revenue are dependent on your system and business practices</p> <p>The available values are:</p> <ul style="list-style-type: none"> • Optional – Blocked rooms do not deduct from inventory • Strong Tentative – Blocked rooms deduct from inventory • Tentative – Blocked rooms deduct from inventory • Weak Tentative – Blocked rooms deduct from inventory • Definite – Confirmed rooms deduct from inventory • Cancelled – Restores inventory if previously deducted • Hold – Blocked rooms do not deduct from inventory • Loss – Blocked rooms do not deduct from inventory • Prospect – Blocked rooms do not deduct from inventory
../Block/Start	1		Date	The start date of the block; formatted using ISO 8601
../Block/End	1		Date	The end date of the block; formatted using ISO 8601



../Block/StartShoulderDuration	0..1		integer	Specifies the number of shoulder days prior to the block start date
../Block/EndShoulderDuration	0..1		integer	Specifies the number of shoulder days after the block end date
../Block/OptionDate	0..1		DateTime	The date the block will be released if not confirmed; formatted using ISO 8601
../Block/CutoffDate	0..1		Object	Specifies when remaining rooms in the block will be released if not reserved
../CutoffDate/Date	0..1		Date	The date the remaining rooms in the block will be released if not reserved; formatted using ISO 8601
../CutoffDate/DaysBeforeStayDate	0..1		integer	This field allows for a dynamic cutoff date to be set This is particularly useful in the case where the block contains mini-blocks or sets of inventory within it, or where the block is a long-term block where reservations can be booked for any portion of the block
../Block/CreatedDateTime	1		DateTime	The date and time that the block was created; formatted using ISO 8601.
../Block/ModifiedDateTime	1		DateTime	The date and time that the block was last modified This field will contain the create date if the block has not been modified; formatted using ISO 8601
../Block/CreatedBy	0..1		String	Specifies who created the block
../Block/ModifiedBy	0..1		String	Specifies who last modified the block
../Block/CancellationBusinessDate	0..1		Date	The business date that the block was cancelled This field is required when the block is cancelled; formatted using ISO 8601
../Block/CancellationDateTime	0..1		DateTime	Real block cancellation date time This field is required when the block status is cancelled; formatted using ISO 8601

../Block/CancellationReason	0..1		String	Specifies the reason the block was cancelled
../Block/Details	0..1		Array	A collection of details about the block
../Details/Detail	1..n	X	Object	One detail item in the collection of block details
../Detail/RoomTypeCode	0..1		String	Identifies a type of room for this block
../Detail/RoomTypeName	1		String	The name of the type of room
../Detail/RoomTypeCategory Code	0..1		String	Specifies the category to which this room type belongs
../Detail/RoomTypeCategory Name	1		String	The name of the category to which this room type belongs
../Detail/UnitType	1		String	<p>An enumerated list used to specify the type of unit</p> <p>The available values are:</p> <ul style="list-style-type: none"> • SingleBedroom • DoubleBedroom • KingBedroom • QueenBedroom • TwinBedroom • TriipleBedroom • QuadrupleBedroom • FamilyRoom • JuniorSuite • Suite • LargeSuite • Parlour • Apartment • Penthouse • Studio • Condo • Loft • Bungalow • Villa • Cottage • Cabin • Lodge • Tent • Dormitory • Bed



				<ul style="list-style-type: none"> • RunOfHouse • Room • ConnectedRoom • Virtual • RVSite • Campsite
../Detail/Units	1		Array	A collection of units
../Units/Unit	1..n	X	Object	One unit item in the collection of units
../Unit/Start	1		Date	Start date and time for this unit type within the block; formatted using ISO 8601
../Unit/End	1		Date	End date and time for this unit type within the block; formatted using ISO 8601
../Unit/RemainingBlockUnit	1		Integer	The number of this unit type remaining to sell within the block
../Unit/RemainingPhysicalUnit	1		Integer	The number of this unit type remaining to sell within the hotel
../Unit/PickedUpBlockUnit	1		Integer	The number of this unit type that has been sold within the block
../Unit/PickedUpPhysicalUnit	1		Integer	The number of this unit type that has been sold within the hotel
../Detail/RatePlans	1		Array	A collection of rate plans
../RatePlans/RatePlan	1..n	X	Object	One rate plan in an array of rate plans
../RatePlan/Start	1		Date	The start date for the rate plan for this group; formatted using ISO 8601
../RatePlan/End	1		Date	The end date for the rate plan for this group; formatted using ISO 8601
../RatePlan/Code	1		String	Identifier for the rate plan
../RatePlan/Name	1		String	The name of the rate plan
../RatePlan/Description	0..1		String	A description of the rate plan
../RatePlan/CategoryCode	0..1		String	A code identifying the category for which this rate plan belongs
../RatePlan/CategoryName	1		String	The name of the category for this rate plan
../Detail/Segmentation	0..1		Object	The business segmentation description of the block

../Segmentation/Markets	0..1		Array	An array of market information
../Markets/Market	1..n	X	Object	One market item in the array of market information
../Market/Start	1		Date	The start business date for which the values defined in the collection applies; formatted using ISO 8601
../Market/End	1		Date	The end business date for which the values defined in the collection applies; formatted using ISO 8601
../Market/Code	0..1		String	The market segment short name
../Market/Name	1		String	The market segment long name
../Market/CategoryCode	0..1		String	The market category short name
../Market/CategoryName	0..1		String	The market category long name
../Segmentation/Sources	0..1		Array	An array of sources
../Sources/Source	1..n	X	Object	One source in an array of sources
../Source/Start	1		Date	The start business date for which the values defined in the collection applies; formatted using ISO 8601
../Source/End	1		Date	The end business date for which the values defined in the collection applies; formatted using ISO 8601
../Source/Code	0..1		String	The source short name
../Source/Name	1		String	The source long name
../Source/CategoryCode	0..1		String	The source category short name
../Source/CategoryName	0..1		String	The source category long name
../Segmentation/Origins	0..1		Array	An array of origins
../Origins/Origin	1..n	X	Object	One origin in an array of origins
../Origin/Start	1		Date	The start business date range for which the values defined in the array applies; formatted using ISO 8601
../Origin/End	1		Date	The end business date range for which the values defined in the array applies formatted using ISO 8601
../Origin/Code	0..1		String	The origin short name
../Origin/Name	1		String	The origin long name
../Origin/CategoryCode	0..1		String	The origin category short name

../ Origin/CategoryName	0..1		String	The origin category long name
../Detail/RevenueDetails	1		Array	An array of revenue details
../RevenueDetails/RevenueDetail	1..n	X	Object	One revenue detail in an array of revenue details
../RevenueDetail/Start	1		Date	The start business date range for which the values defined in the array applies; formatted using ISO 8601
../RevenueDetail/End	1		Date	The end business date range for which the values defined in the array applies; formatted using ISO 8601
../RevenueDetail/RevenueType	1		String Enumeration	An enumerated list that specifies the revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Taxes • Other
../RevenueDetail/RevenueCode	1		String	Revenue code associated to the rate
../RevenueDetail/RemainingRevenue	1		Object	The definition of the remaining revenue for the block generated by the room that have not been picked up yet
../ RemainingRevenue/Amount	1		Decimal	The amount of the remaining revenue allocated to the revenue code
../ RemainingRevenue/Taxes	1		Array	An array of taxes
../Taxes/Tax	1..n	X	Object	One tax in an array of taxes
../Tax/Type	1		String	Specifies the type of tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		Decimal	The amount of the tax
../Tax/IsIncluded	1		Boolean	When true, this tax is included in the remaining revenue amount
../ RevenueDetail/PickedUpRevenue/	1		Object	Details of the revenue produced by the rooms that have been picked up
../ PickedUpRevenue/Amount	1		Decimal	The amount of revenue produced by the rooms that have been picked up

../PickedUpRevenue/Taxes	1		Array	An array of taxes
../Taxes/Tax	1..n	X	Object	One tax in an array of taxes
../Tax/Type	1		String	Specifies the type of tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		Decimal	The amount of the tax
../Tax/IsIncluded	1		Boolean	When true, this tax is included in the picked-up revenue amount
../Details/Detail/Fees	1		Array	An array of fees
../Fees/Fee	1..n	X	Object	One fee in an array of fees
../Fee/Start	1		Date	The start date for which the fee applies; formatted using ISO 8601
../Fee/End	1		Date	The end date for the fee; formatted using ISO 8601
../Fee/FeeDetails	1		Array	An array of fee details
../FeeDetails/FeeDetail	1..n	X	Object	One fee detail in an array of fee details
../FeeDetail/RevenueType	1		String	The revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Taxes • Other
../FeeDetail/RevenueCode	1		String	The revenue code for the fee
../FeeDetail/Code	1		String	A code that specifies the type of fee
../FeeDetail/Amount	1		Decimal	The amount of the fee
../FeeDetail/IsIncluded	1		Boolean	When true, this fee is included in the revenue amount
../FeeDetail/Taxes	1		Array	A collection of taxes
../Taxes/Tax	1..n	X	Object	One tax in an array of taxes
../Tax/Type	1		String	Specifies the type of tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc)
../Tax/Amount	1		Decimal	The amount of the tax
../Tax/IsIncluded	1		Boolean	When true, this tax is included in the revenue amount



../Details/Detail/RoomAddOns	0..1		Array	A collection of add-ons to the block; add-ons are by default included in the rate
../RoomAddOns/RoomAddOn	1..n	X	Object	One add-on item in the collection of add on items
../RoomAddOn/Start	1		Date	The start business date for which the values defined in the collection applies; formatted using ISO 8601
../RoomAddOn/End	1		Date	The end business date for which the values defined in the collection applies; formatted using ISO 8601
../RoomAddOn/Code	1		String	A code that specifies the type of add on
../RoomAddOn/Description	0..1		String	A description of the add on
../RoomAddOn/RateCode	1		String	The rate code of the add on
../RoomAddOn/RemainingQuantity	1		Integer	The quantity of the add on that is available
../RoomAddOn/PickedUpQuantity	1		Integer	The quantity of the add on that has been reserved
../RoomAddOn/UnitPricings	1		Array	An array of unit pricings
../UnitPricings/UnitPricing	1..n	X	Object	One unit pricing in an array of unit pricings
../UnitPricing/RevenueType	1		String	An enumerated list identifying the revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Taxes • Other
../UnitPricing/RevenueCode	1		String	The revenue code for the price item
../UnitPricing/Amount	1		Decimal	Amount of the price item
../UnitPricing/Taxes	1		Array	An array of taxes
../Taxes/Tax	1..n	X	Object	One tax in an array of taxes
../Tax/Type	1		String	Specifies the type of tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc.)
../Tax/Amount	1		Decimal	The amount of the tax



../Tax/IsIncluded	1		Boolean	When true, this tax is included in the unit price
../UnitPricing/ChargeUnit	1		String enumeration	Specifies the multiplier on the amount to calculate the total The enumerated list includes: <ul style="list-style-type: none"> • Per room per stay • Per room per stay • Per person per stay • Per person per night
../Details/Detail/Additions	0..1		Array	An array of additions
../Additions/Addition	1..n	X	Object	One addition in an array of additions
../Addition/Start	1		Date	The start business date for which the values defined in the collection applies; formatted using ISO 8601
../Addition/End	1		Date	The end business date for which the values defined in the collection applies; formatted using ISO 8601
../Addition/Code	1		String	A code identifying the type of addition
../Addition/Description	0..1		String	A description of the addition
../Addition/RateCode	1		String	The rate code for the addition
../Addition/RemainingQuantity	1		Integer	The quantity of the addition that is available for the block
../Addition/PickedUpQuantity	1		Integer	The quantity of the addition that has been reserved
../Addition/UnitPricings	1		Array	An array of unit pricings
../UnitPricings/UnitPricing	1..n	X	Object	One unit pricing in an array of unit pricings
../UnitPricing/RevenueType	1		String	The revenue type for the price item The available values are: <ul style="list-style-type: none"> • Accommodation • FoodAndBeverage • Taxes • Other
../UnitPricing/RevenueCode	1		String	The revenue code for the price item
../UnitPricing/Amount	1		Decimal	Amount of the price item
../UnitPricing/Taxes	1		Array	An array of taxes



../Taxes/Tax	1..n	X	Object	One tax in an array of taxes
../Tax/Type	1		String	Specifies the type of tax
../Tax/Code	1		String	Identifies the tax (city, VAT, etc).
../Tax/Amount	1		Decimal	The amount of the tax
../Tax/IsIncluded	1		Boolean	When true, this tax is included in the unit price
../UnitPricing/ChargeUnit	1		String enumeration	Specifies the multiplier on the amount to calculate the total The enumerated list includes: <ul style="list-style-type: none"> • Per room per stay • Per room per night • Per person per stay • Per person per night

4.3.1 Global Sample Message: XML

The following is a sample Block message in XML format:

```
<HTNG_BlocksNotifRQ xsi:schemaLocation="http://htng.org/2019A HTNG_BlocksNotifRQ.xsd"
xmlns="http://htng.org/2018B" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Blocks>
    <Block>
      <NotificationType>New</NotificationType>
      <PropertyID>1234543</PropertyID>
      <BlockID>896796969</BlockID>
      <ConfirmationID>69870707</ConfirmationID>
      <ExternalReferences>
        <ExternalReference>
          <ID>17644897</ID>
          <Name>ARTE Travel</Name>
          <IsPointOfSale>true</IsPointOfSale>
          <Type>TravelAgent</Type>
          <BlockID>696969-1</BlockID>
        </ExternalReference>
      </ExternalReferences>
      <Code>XG18</Code>
      <Name>Xmas Group 18</Name>
      <Type>Group</Type>
      <Status>Definite</Status>
      <Start>2018-12-20</Start>
      <End>2018-12-30</End>
    </Block>
  </Blocks>
</HTNG_BlocksNotifRQ>
```



```
<OptionDate>2018-12-01</OptionDate>
<CreatedDateTime>2017-12-01T09:30:47Z</CreatedDateTime>
<ModifiedDateTime>2017-12-01T09:30:47Z</ModifiedDateTime>
<CreatedBy>PMS</CreatedBy>
<ModifiedBy>PMS</ModifiedBy>
<Details>
  <Detail>
    <RoomTypeCode>DBL</RoomTypeCode>
    <RoomTypeName>Room</RoomTypeName>
    <RoomTypeCategoryCode>DBL</RoomTypeCategoryCode>
    <RoomTypeCategoryName>DBL</RoomTypeCategoryName>
    <UnitType>Room</UnitType>
    <Units>
      <Unit>
        <Start>2018-12-20</Start>
        <End>2018-12-30</End>
        <RemainingBlockUnit>9</RemainingBlockUnit>
        <RemainingPhysicalUnit>9</RemainingPhysicalUnit>
        <PickedUpBlockUnit>1</PickedUpBlockUnit>
        <PickedUpPhysicalUnit>1</PickedUpPhysicalUnit>
      </Unit>
    </Units>
    <RatePlans>
      <RatePlan>
        <Start>2018-12-20</Start>
        <End>2018-12-30</End>
        <Code>GROUPBB</Code>
        <Name>GROUPBB</Name>
        <Description>Special group rate</Description>
        <CategoryCode>GROUPBB</CategoryCode>
        <CategoryName>GROUPBB</CategoryName>
      </RatePlan>
    </RatePlans>
    <Segmentation>
      <Markets>
        <Market>
          <Start>2018-12-20</Start>
          <End>2018-12-30</End>
          <Code>DE</Code>
          <Name>DE</Name>
          <CategoryCode>DE</CategoryCode>
          <CategoryName>DE</CategoryName>
        </Market>
      </Markets>
      <Sources>
        <Source>
          <Start>2018-12-20</Start>
          <End>2018-12-30</End>
          <Code>ON</Code>
        </Source>
      </Sources>
    </Segmentation>
  </Detail>
</Details>
```



```
        <Name>ON</Name>
        <CategoryCode>ON</CategoryCode>
        <CategoryName>ON</CategoryName>
    </Source>
</Sources>
<Origins>
    <Origin>
        <Start>2018-12-20</Start>
        <End>2018-12-30</End>
        <Code>ON</Code>
        <Name>ON</Name>
        <CategoryCode>ON</CategoryCode>
        <CategoryName>ON</CategoryName>
    </Origin>
</Origins>
</Segmentation>
<RevenueDetails>
    <RevenueDetail>
        <Start>2018-12-20</Start>
        <End>2018-12-30</End>
        <RevenueType>Accommodation</RevenueType>
        <RevenueCode>Room only</RevenueCode>
        <RemainingRevenue>
            <Amount>2000.00</Amount>
            <Taxes>
                <Tax>
                    <Type>VAT</Type>
                    <Code>VAT 10%</Code>
                    <Amount>200.00</Amount>
                    <IsIncluded>>true</IsIncluded>
                </Tax>
            </Taxes>
        </RemainingRevenue>
        <PickedUpRevenue>
            <Amount>200.00</Amount>
            <Taxes>
                <Tax>
                    <Type>VAT</Type>
                    <Code>VAT 10%</Code>
                    <Amount>20.00</Amount>
                    <IsIncluded>>true</IsIncluded>
                </Tax>
            </Taxes>
        </PickedUpRevenue>
    </RevenueDetail>
    <RevenueDetail>
        <Start>2018-12-20</Start>
        <End>2018-12-30</End>
        <RevenueType>FoodAndBeverage</RevenueType>
```



```
<RevenueCode>Breakfast</RevenueCode>
<RemainingRevenue>
  <Amount>2000.00</Amount>
  <Taxes>
    <Tax>
      <Type>VAT</Type>
      <Code>VAT 10%</Code>
      <Amount>200.00</Amount>
      <IsIncluded>>true</IsIncluded>
    </Tax>
  </Taxes>
</RemainingRevenue>
<PickedUpRevenue>
  <Amount>200.00</Amount>
  <Taxes>
    <Tax>
      <Type>VAT</Type>
      <Code>VAT 10%</Code>
      <Amount>20.00</Amount>
      <IsIncluded>>true</IsIncluded>
    </Tax>
  </Taxes>
</PickedUpRevenue>
</RevenueDetail>
</RevenueDetails>
<Fees>
  <Fee>
    <Start>2001-12-17</Start>
    <End>2001-12-17</End>
    <FeeDetails>
      <FeeDetail>
        <RevenueType>Taxes</RevenueType>
        <RevenueCode>Other Taxes</RevenueCode>
        <Code>City tax</Code>
        <Amount>3.00</Amount>
        <IsIncluded>>false</IsIncluded>
      </FeeDetail>
    </FeeDetails>
  </Fee>
</Fees>
<RoomAddOns>
  <RoomAddOn>
    <Start>2018-12-20</Start>
    <End>2018-12-30</End>
    <Code>Breakfast Buffet</Code>
    <Description>Breakfast Buffet</Description>
    <RateCode>GroupBB</RateCode>
    <RemainingQuantity>10</RemainingQuantity>
    <PickedUpQuantity>1</PickedUpQuantity>
```



```
<UnitPricings>
  <UnitPricing>
    <RevenueType>FoodAndBeverage</RevenueType>
    <RevenueCode>Breakfast</RevenueCode>
    <Amount>10.00</Amount>
    <Taxes>
      <Tax>
        <Type>VAT</Type>
        <Code>VAT 10%</Code>
        <Amount>1.00</Amount>
        <IsIncluded>>true</IsIncluded>
      </Tax>
    </Taxes>
    <ChargeUnit>Per person per night</ChargeUnit>
  </UnitPricing>
</RoomAddOn>
</RoomAddOns>
<Additions>
  <Addition>
    <Start>2018-12-20</Start>
    <End>22018-12-30</End>
    <Code>Ticket PP</Code>
    <Description>Pool Party Package</Description>
    <RateCode>GroupBB</RateCode>
    <RemainingQuantity>10</RemainingQuantity>
    <PickedUpQuantity>1</PickedUpQuantity>
    <UnitPricings>
      <UnitPricing>
        <RevenueType>FoodAndBeverage</RevenueType>
        <RevenueCode>Bar</RevenueCode>
        <Amount>50.00</Amount>
        <Taxes>
          <Tax>
            <Type>VAT</Type>
            <Code>VAT 10%</Code>
            <Amount>5.00</Amount>
            <IsIncluded>>true</IsIncluded>
          </Tax>
        </Taxes>
        <ChargeUnit>Per person per stay</ChargeUnit>
      </UnitPricing>
      <UnitPricing>
        <RevenueType>Other</RevenueType>
        <RevenueCode>DJ</RevenueCode>
        <Amount>10.00</Amount>
        <Taxes>
          <Tax>
            <Type>VAT</Type>

```



```

        <Code>VAT 10%</Code>
        <Amount>1.00</Amount>
        <IsIncluded>true</IsIncluded>
    </Tax>
</Taxes>
    <ChargeUnit>Per person per stay</ChargeUnit>
</UnitPricing>
</UnitPricings>
</Addition>
</Additions>
</Detail>
</Details>
</Block>
</Blocks>
</HTNG_BlocksNotifRQ> </Blocks>
</HTNG_BlocksNotifRQ>
    
```

4.3.2 Global Sample Message: JSON

The following is a sample Block message in JSON format:

```

{
  "Blocks" : [{
    "NotificationType" : "New",
    "PropertyID" : "1234543",
    "BlockID" : "896796969",
    "ConfirmationID" : "69870707",
    "ExternalReferences" : [{
      "ID" : "17644897",
      "Name" : "ARTE Travel",
      "IsPointOfSale" : true,
      "Type" : "TravelAgent",
      "BlockID" : "696969-1"
    }
  ],
  "Code" : "HOL18",
  "Name" : "Holidays 18",
  "Type" : "Group",
  "Status" : "Definite",
  "Start" : "2018-07-01",
  "End" : "2018-07-06",
  "StartShoulderDuration" : null ,
  "EndShoulderDuration" : null,
  "OptionDate" : "2018-06-01",
}
    
```




```
"CutOffDate" : {
  "Date" : null,
  "DaysBeforeStayDate" : null
},
"CreatedDateTime" : "2017-12-01T13:36:47.550+1:00",
"ModifiedDateTime" : "2017-12-10T13:36:47.550+1:00",
"CreatedBy" : "PMS",
"ModifiedBy" : "PMS",
"CancellationBusinessDate" : null,
"CancellationDateTime" : null,
"CancellationReason" : null,
"Details": [{
  "RoomTypeCode" : "DBL",
  "RoomTypeName" : "Double",
  "RoomTypeCategoryCode" : "SUP",
  "RoomTypeCategoryName" : "Superior",
  "UnitType" : "Room",
  "Units": [{
    "Start" : "2018-07-01",
    "End" : "2018-07-07",
    "RemainingBlockUnit" : 9,
    "RemainingPhysicalUnit" : 9,
    "PickedUpBlockedUnit" : 1,
    "PickedPhysicalUnit" : 1
  }
],
"RatePlans": [{
  "Start" : "2018-07-01",
  "End" : "2018-07-07",
  "Code" : "HOL",
  "Name" : "Holidays",
  "Description" : "Holidays offer 2018",
  "CategoryCode" : "OF18",
  "CategoryName" : "Offer 2018"
}
],
"Segmentation": {
  "Markets": [{
    "Start" : "2018-07-01",
    "End" : "2018-07-06",
    "Code" : "INDLEI",
```



```
        "Name" : "Individual Leisure",
        "CategoryCode" : "IND",
        "CategoryName" : "Individual"
    }
},
"Sources": [{
    "Start" : "2018-07-01",
    "End" : "2018-07-06",
    "Code" : "OTA",
    "Name" : "Online Travel Agent",
    "CategoryCode" : "TA",
    "CategoryName" : "Travel Agent"
}
],
"Origins": [{
    "Start" : "2018-07-01",
    "End" : "2018-07-06",
    "Code" : "CRS",
    "Name" : "Central Reservation System",
    "CategoryCode" : "DIST",
    "CategoryName" : "Distribution"
}
]
},
"Revenuedetails": [{
    "Start" : "2018-07-01",
    "End" : "2018-07-03",
    "RevenueType" : "Accommodation",
    "RevenueCode" : "Room only",
    "RemainingRevenue" : {
        "Amount" : 1080.00,
        "Taxes" : [{
            "Type" : "VAT",
            "Code" : "VAT 10 %",
            "Amount" : 108.00,
            "IsIncluded" : true
        }
    ]
}
],
"PickedUpRevenue" : {
    "Amount" : 120.00,
```



```
        "Taxes" : [{
            "Type" : "VAT",
            "Code" : "VAT 10 %",
            "Amount" : 12.00,
            "IsIncluded" : true
        }
    ]
}
}, {
    "Start" : "2018-07-04",
    "End" : "2018-07-06",
    "RevenueType" : "Accommodation",
    "RevenueCode" : "Room only",
    "RemainingRevenue" : {
        "Amount" : 1440.00,
        "Taxes" : [{
            "Type" : "VAT",
            "Code" : "VAT 10 %",
            "Amount" : 144.00,
            "IsIncluded" : true
        }
    ]
},
    "PickedUpRevenue" : {
        "Amount" : 160.00,
        "Taxes" : [{
            "Type" : "VAT",
            "Code" : "VAT 10 %",
            "Amount" : 16.00,
            "IsIncluded" : true
        }
    ]
}
}, {
    "Start" : "2018-07-01",
    "End" : "2018-07-06",
    "RevenueType" : "FoodAndBeverage",
    "RevenueCode" : "Breakfast",
    "RemainingRevenue" : {
        "Amount" : 180.00,
        "Taxes" : [{
            "Type" : "VAT",
```



```
        "Code" : "VAT 10 %",
        "Amount" : 18.00,
        "IsIncluded": true
      }
    ]
  },
  "PickedUpRevenue" : {
    "Amount": 20.00,
    "Taxes": [{
      "Type" : "VAT",
      "Code" : "VAT 10 %",
      "Amount" : 2.00,
      "IsIncluded" : true
    }
  ]
}
],
"Fees" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-01",
  "FeeDetails" : [{
    "RevenueType" : "Taxes",
    "RevenueCode" : "Other Taxes",
    "Code" : "City Tax",
    "Amount" : 3.00,
    "IsIncluded" : false
  }
]
}
],
"RoomAddons" : [{
  "Start" : "2018-07-01",
  "End" : "2018-07-06",
  "Code" : "Breakfast Buffet",
  "Description" : "Breakfast Buffet",
  "RateCode" : "HOL",
  "UnitPricings" : [{
    "RevenueType" : "FoodAndBeverage",
    "RevenueCode" : "Breakfast",
    "Amount" : 10.00,
```



```
        "Taxes" : [{
            "Type" : "VAT",
            "Code" : "VAT 10 %",
            "Amount" : 1.00,
            "IsIncluded" : true
        }
    ],
    "ChargeUnit" : "Per person per stay"
}
]
}
],
"Additions" : [{
    "Start" : "2018-07-01",
    "End" : "2018-07-01",
    "Code" : "Ticket PP",
    "Description" : "Pool Party Package",
    "RateCode" : "HOL",
    "UnitPricings" : [{
        "RevenueType" : "FoodAndBeverage",
        "RevenueCode" : "Bar",
        "Amount" : 50.00,
        "Taxes" : [{
            "Type" : "VAT",
            "Code" : "VAT 10 %",
            "Amount" : 5.00,
            "IsIncluded" : true
        }
    ]
    },
    "ChargeUnit" : "Per person per stay"
}], {
    "RevenueType" : "Other",
    "RevenueCode" : "Dj",
    "Amount" : "10",
    "Taxes" : [{
        "Type" : "VAT",
        "Code" : "VAT 10 %",
        "Amount" : 1.00,
        "IsIncluded" : true
    }
    ],
    "ChargeUnit" : "Per person per stay"
}
```

```

    }
  ]
}

```

4.4 Point of Sale – Check

A collection of individual POS check transactions at any stage of their lifecycle.

Data Element Table – Request

Element @Attribute	Card in-ality	XML Only	Data Type	Description/Contents
HTNG_PointOfSaleNotifRQ	1			This message provides details for one POS check
MetadataInformation	1		Object	A collection of data that serves to provide context or additional information about the other data within this message
../MetadataInformation/Metadata	0..1	X	AnyType	Used to hold an optional Metadata object which can contain any elements needed for the metadata Examples include: correlation ID and timestamps However, in SOAP messages, this is typically carried in the SOAP header
../MetadataInformation/TimeStamp	1		DateTime	Date/time this transaction was created or last updated in the source system encoded as ISO 8601
../MetadataInformation/Language	0..1		Language	The language in which this message is being transmitted encoded as ISO 639-3
../MetadataInformation/Currency	0..1		CurrencyCodeType	Specifies the currency in which amounts are represented throughout the message



../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../MetadataInformation/TransactionStatus	0..1		String Enumeration	The physical status of the check in the POS system at the time the message is created Available options: <ul style="list-style-type: none"> • Open • Closed
../MetadataInformation/Location	1		Object	Specifies the location to which the transaction belongs
../Location/ID	0..1		String	Identifier for location to which the transaction belongs
../Location/Name	0..1		String	Name of location to which the transaction belongs
../Location/ChainCode	0..1		String	A code that identifies the chain related to the location
../Location/BrandCode	0..1		String	A code that identifies the brand related to the location
TransactionID	1		String	A global unique identifier for the transaction. This may be the check ID if the POS does not assign a transaction ID. If the POS uses both a transaction ID and a check ID, the check ID is sent in the Reference ID block.
ReferenceIDs	0..1		ReferenceID_Type	A collection of strings that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceIDs/ReferenceID	1..n		Array	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceID/ID	1		String	ID of the reference
../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
AdditionalReferences	0..1		AdditionalReferenceType	A collection of associated objects with their IDs and business attributes (e.g. events, reservations)
../AdditionalReferences/AdditionalReference	1..n		Array	An associated object with its ID and business attributes (e.g. events, reservations)



../AdditionalReference/ID	1		String	ID of the reference
../AdditionalReference/Type	0..n		String	Specifies the type of reference (e.g. Event, Origin, Reservation)
../AdditionalReference/SubType	0..n		String	A sub-type related to the type (e.g. if the type is Event, the SubType may be Wedding or Conference)
../AdditionalReference/SystemName	1		String	The name or ID of the referenced system
../AdditionalReference/Name	0..1		String	The name of the item being referenced (e.g. Smith Wedding)
SourceSystem	1		String	POS system transaction came from
Outlet	0..1		OutletType	Information about the outlet/cost center where this transaction was generated
../Outlet/ID	0..1		String	ID of outlet, such as ID of concession stand or airport store
../Outlet/Name	0..1		String	Name of outlet, such as name of concession stand or airport store
../Outlet/TerminalID	0..1		String	The ID of the terminal/POS device
../Outlet/TerminalDescription	0..1		String	A description of the terminal /POS device
../Outlet/TableNumber	0..1		String	If at a restaurant, the table number the order will be delivered to
../Outlet/ReferenceIDs	0..1		ReferenceID_Type	A collection of strings that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceIDs/ReferenceID	1..n		Array	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceID/ID	1		String	ID of the reference
../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
Customers	0..1		Object	Information about the customers of this transaction
Customers/Customer	0..n		Array	Information about a customer of this transaction
../Customer/CustomerName	0..1		CustomerName_Type	Detailed name information for the customer
../CustomerName/GivenName	0..1		String	Given name, first name or names
../CustomerName/Surname	0..1		String	Family name/last name; this may also be used for a full name if the sending

				system does not have the ability to separate a full name into its parts (e.g. the surname element may be used to pass the full name)
../CustomerName/Name	0..1		String	Name of the customer which is used if the sending system does not have the ability to separate the full name into its parts (e.g. given name and surname)
../CustomerName/DeletedInd	0..1		Boolean	When true, the customer is deleted from the source system
../Customer/CompanyName	0..1		String	The name of the company with whom the customer is employed
../Customer/Address	0..n		Array of AddressType	Detailed information on an address for the customer
../Address/FormattedInd	0..1		Boolean	When true, the address is formatted and uses the specific address fields. When false, the address is unformatted and is sent in the AddressLine elements
../Address/Type	0..1		String Enumeration	Specifies the type of address Available values: <ul style="list-style-type: none"> • Home • Business
../Address/UseType	0..1		String Enumeration	Describes the use of the address Available values: <ul style="list-style-type: none"> • Billing • Delivery
../Address/AddressLines	0..1		Object	When the address is unformatted (FormattedInd="false") these lines will contain free form address details
../AddressLines/AddressLine	0..5		String	When the address is formatted and street number and street name must be sent independently, the street number will be sent using StreetNmbr, and the street name will be sent in the first AddressLine occurrence
../Address/CityName	0..1		String	City (e.g., Dublin), town, or postal station (i.e., a postal service territory, often used in a military address)
../Address/PostalCode	0..1		String	Post Office Code number
../Address/County	0..1		String	County or Region Name (e.g. Fairfax)

../Address/StateProv	0..1		String	State or Province name (e.g. Texas)
../Address/CountryCode	0..1		String	A code identifying the country for the address - ISO Code 3166 Alpha 2
../Customer/Telephones	0..n		Array	A collection of telephone numbers for the customer
../Telephones/PhoneNumber	0..1		String	Customer phone number
../Telephones/Type	0..1		String	Customer phone type (e.g. mobile, fax, etc.)
../Customer/Email	0..1		String	Email address for the customer
LoyaltyPrograms	0..1		Object	A collection of loyalty program information related to the transaction
LoyaltyPrograms/Loyalty	0..n		Array of LoyaltyType	Loyalty information related to the transaction
../Loyalty/ID	1		String	The customer's loyalty ID
../Loyalty/ProgramID	1		String	The identifier or name for the loyalty program
../Loyalty/Level	0..1		String	Specifies the customer's level (e.g. gold, silver, etc.) in the loyalty program
../Loyalty/MemberName	0..1		String	The name of the member that corresponds to this loyalty ID
DateOpened	1		DateTime	When transaction was started encoded as ISO 8601
DateClosed	0..1		DateTime	When transaction was finished encoded as ISO 8601
DatePosted	0..1		DateTime	When transaction was posted to Back-of-House system encoded as ISO 8601
BusinessDate	0..1		Date	The business date for the transaction
Destination	0..1		String	The destination of the order where the food is being delivered (e.g. drive thru, bar, table, counter, pool bar, etc.) Destination, such as Dine In versus Take Out, may affect how an order is taxed (destination may control active tax rates for a transaction)
OrderType	0..1		String	Specifies where the order is placed (e.g. kiosk, mobile app, counter, bar, server, etc.)
CheckNumber	0..1		String	Number printed on receipt; not unique, usually sequential



				Cycles each day or through out the day
CheckStatus	1		String Enumeration	The business status of the transaction in the POS system at the time the message is created Available options: <ul style="list-style-type: none"> • Sale • Overring • Void • Return • NoSale • Waste • Canceled • Negative
CustomerCount	0..1		Object	The number of people related to the transaction (e.g. in a restaurant this may be the number of covers)
../CustomerCount/Total	1		Integer	The total number of people related to the transaction The total should not exceed the sum of the age demographic counts.
../CustomerCount/AgeDemographics	0..1		Object	A collection of age demographics
../AgeDemographics/AgeDemographic	1..n		Array	The total number of people related to the transaction
../AgeDemographic/Type	1		String	Specifies the type of age demographic (e.g. child, adult, senior)
../AgeDemographic/Count	1		Integer	The number in the party that is part of this age demographic type
EmployeeInfos	0..1		Object	A collection of employee information
../EmployeeInfos/EmployeeInfo	1..n		Array of EmployeeInfoType	Employee working hours information
../EmployeeInfo/EmployeeID	1		String	Identifier for employee tracking work time (may be a name or an employee ID)
../EmployeeInfo/GivenName	0..1		String	First name of employee tracking work time, if available
../EmployeeInfo/Surname	0..1		String	Last name of employee tracking work time, if available
../EmployeeInfo/ClockInfos	0..1		Object	A collection of information on time worked by an employee



../ClockInfos/ClockInfo	1..n		Array of ClockInformationType	Information on time (hours) worked by employee
../ClockInformation/ClockInTime	0..1		DateTime	Time employee starts working hours (i.g. shift) encoded as ISO 8601
../ClockInformation/ClockOutTime	0..1		DateTime	Time employee finishes working hours (i.g. shift) encoded as ISO 8601
../ClockInformation/Shift	0..n		String	Shift employee is assigned to (e.g. breakfast shift, split shift, late shift, night shift, etc.)
Employees	1		Object	Identifier for employee related to the transaction
../Employees/Employee	0..n		Array of EmployeeType	A collection of employees
../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: <ul style="list-style-type: none"> • Approver • Originator
Order	0..1		Object	The order from which this check was derived
../Order/Source	0..1		ReferenceID_Type	Specifies where the order originated (e.g. kiosk, counter, internet, third party delivery service) If source is not sent it is assumed the order originated in the POS itself
../Source/ReferenceID	1		Array	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
../Source/ID	1		String	ID of the reference
../Source/Type	1		String	Specifies the type of reference
../Source/SystemName	1		String	The name or ID of the referenced system
../Order/CreatedDateTime	1		DateTime	The date and time the order was created
../Order/LastModified	1		DateTime	The date and time the order was last changed
../Order/Employees	1		Object	Identifier for employees related to the order
../Employees/Employee	0..n		Array of EmployeeType	A collection of employees

../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: <ul style="list-style-type: none"> • Approver • Originator
../Order/Status	1		String Enumeration	The status of the order Available options: <ul style="list-style-type: none"> • New • Canceled • InPreparation • ReadyForPickup • PickedUpByGuest • OutForDelivery • Delivered • DeliveryFailed • PartiallyDelivered • DeliveredWithoutAlcohol
SaleItems	0..1		Object	A collection of products/items sold
../SaleItems/SaleItem	0..n		Array of SaleItemType	A product or item sold
../SaleItem/ID	1		String	Identifier of product in source system If the ID is not available, the name should be repeated in this field
../SaleItem/Name	1		String	Name of sale item such as name of item on menu
../SaleItem/Categories	0..1		CategoriesType	Categories to which a sale item sold belongs For example, A Club Sandwich (Menu Item) belongs to multiple categories such as Sandwich (Category Name) and Food (Category Name) The system would create two records; one for the Food and a second one for the Sandwich (note that a hierarchy relation is not reflected in this design)
../Categories/Category	0..n		Array of CategoryType	A single category out of the collection of categories

../Category/Name	0..1		String	The name or value within a category type
../Category/ID	0..1		String	Unique identifier for category in source system
../Category/Type	0..1		String	Specifies the type of category (e.g. classID)
../SaleItem/DatePosted	1		DateTime	When item was added to transaction, if available If not present, it is assumed to be the same as date posted value on the sale item, encoded as ISO 8601
../SaleItem/BusinessDate	0..1		Date	The business date for the sale item
../SaleItem/Status	1		String Enumeration	The status of sale item on transaction Available options: <ul style="list-style-type: none"> • Sale • Cancel • Void • Return
../SaleItem/StatusComment	0..1		String	A comment entered by the employee related to a change in the status (e.g. a void reason code)
../SaleItem/Amount	1		Decimal	Extended price of the product at time of sale (unit price multiplied by quantity) - does not include any discounts
../SaleItem/Currency	0..1		CurrencyCodeType	Specifies the currency for the amount if different from currency in metadata
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../SaleItem/Modifiers	0..1		Object	A collection of modifiers to the sale item (e.g. such as extra bacon or no mayonaise)
../Modifiers/Modifier	0..n		Array of ModifierType	A modifier to the sale item
../Modifier/ID	1		String	The original identifier of the modifier in the source system If the ID is not available, the name should be repeated in this field
../Modifier/Name	1		String	The name of the modifier



../Modifier/Categories	0..1		CategoryType	<p>Categories to which a modifier belongs</p> <p>For example, Bacon (Menu Item) to a Club Sandwich belongs to multiple categories such as Modifier Food (Category Name) and Food (Category Name)</p> <p>The system would create two records; one for the Food and the a second one for the Modifier Food (note that a hierarchy relation is not reflected in this design)</p>
../Categories/Category	0..n		Array of CategoryType	A single category out of the collection of categories
../Category/Name	0..1		String	The name or value within a category type
../Category/ID	0..1		String	Unique identifier for category in source system
../Category/Type	0..1		String	Specifies the type of category (e.g. classID)
../SaleItem/Comments	0..1		CommentType	A comment related to the sale item; this is entered by the employee making the sale
../Comments/Comment	0..n		Array	A single comment within a collection of comments
../Comment/TimeStamp	0..1		DateTime	The date and time this comment was created encoded as ISO 8601
../Comment/Text	1		String	The comment
../Comment/Type	0..1		String	Identifies the type of comment (e.g. void reason)
../SaleItem/Cost	0..1		Decimal	Product of the unit cost of the sale item multiplied by the quantity
../SaleItem/DatePosted	0..1		DateTime	<p>When item was added to transaction, if available</p> <p>If not present, it is assumed to be the same as date posted value on the sale item, encoded as ISO 8601</p>
../SaleItem/ProductDescription	0..1		String	A description of the sale item
../SaleItem/TaxExemptInd	0..1		Boolean	When true, product is exempt from sales tax (if available in source system)
../Modifier/Categories	0..1		CategoriesType	Categories to which a modifier belongs

				<p>For example, Bacon (Menu Item) to a Club Sandwich belongs to multiple categories such as Modifier Food (Category Name) and Food (Category Name)</p> <p>The system would create two records; one for the Food and a second one for the Modifier Food (note that a hierarchy relation is not reflected in this design)</p>
../Categories/Category	0..n		Array	A single category out of the collection of categories
../Category/Name	0..1		String	The name or value within a category type
../Category/ID	0..1		String	Unique identifier for category in source system
../Category/Type	0..1		String	Specifies the type of category (e.g. classID)
../Modifier/DatePosted	0..1		DateTime	<p>When the modifier was added to transaction, if available</p> <p>If not present, it is assumed to be the same as date posted value on the sale item, encoded as ISO 8601</p>
../Modifier/BusinessDate	0..1		Date	The business date for the modifier
../Modifier/Status	0..1		String Enumeration	<p>Final status of a modifier</p> <p>Available options:</p> <ul style="list-style-type: none"> • Sale • Delete • Cancel • Void • Return
../Modifier/StatusComment	0..1		String	A comment entered by the employee related to a change in the status (e.g. a void reason code)
../Modifier/Amount	1		Decimal	Amount associated with the modifier
../Modifier/Currency	0..1		CurrencyCodeType	Specifies the currency for the amount if different from currency in metadata
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency



../Modifier/IncludedInd	0..1		Boolean	When true, the amount of the modifier is included in the sale item amount
../Modifier/Quantity	1		Decimal	Number of the modifiers (usually 1)
../Modifier/Measurement	0..1		Object	Provides the unit and unit of measure associated with the modifier
../Measurement/UnitOfMeasure	1		OTA_CodeType	Used in conjunction with Units, UnitOfMeasure allows for determining the price of a product sold by a specific measurement For example, an item sold by ounces would have a Quantity of 1, with the Unit being the weight of the item in ounces, and the UnitOfMeasure as "ounces" Refer to OpenTravel Codelist Unit of measure (UOM)
../Measurement/Units	1		Decimal	Used in conjunction with UnitOfMeasure, Units allow for determining the price of a product sold by a specific measurement For example, an item sold by ounces would have a Quantity of 1, with the Unit being the weight of the item in ounces, and the UnitOfMeasure as "ounces"
../Modifier/Employees	0..1		Object	A collection of employees associated with the modifier
../Employees/Employee	1..n		Array of EmployeeType	An employee associated with the modifier
../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: <ul style="list-style-type: none"> • Approver • Originator
../Modifier/ProductDescription	0..1		String	A description of the modifier
../Modifier/ReferenceIDs	0..1		ReferenceID_Type	A collection of IDs to identify the object on the system
../ReferenceIDs/ReferenceID	1..n		Array	A collection of IDs to identify the object on the system
../ReferenceID/ID	1		String	ID of the reference

../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
../Modifier/LineItemID	0..1		String	The unique ID of the line item used to reference the modifier in the check context
../Modifier/VendorProductCode	0..1		String	Identifier for product from vendor, usually only for retail
../Modifier/Cost	0..1		Decimal	Extended cost of the modifier (unit cost multiplied by the quantity)
../Modifier/Comments	0..1		CommentType	Comments related to the modifier
../Comments/Comment	1..n		Array	A single comment within a collection of comments
../Comment/TimeStamp	0..1		DateTime	The date and time this comment was created encoded as ISO 8601
../Comment/Text	1		String	The comment
../Comment/Type	0..1		String	Identifies the type of comment (e.g. void reason)
../SaleItem/Quantity	1		Decimal	States how much of a specific item was sold as part of this transaction
../SaleItem/TaxExemptInd	0..1		Boolean	When true, product is exempt from sales tax (if available in source system)
../SaleItem/Measurement	0..1		Object	Provides the unit and unit of measure associated with the sale item
../Measurement/UnitOfMeasure	1		OTA_CodeType	Used in conjunction with Units, UnitOfMeasure allows for determining the price of a product sold by a specific measurement For example, an item sold by ounces would have a Quantity of 1, with the Unit being the weight of the item in ounces, and the UnitOfMeasure as "ounces" Refer to OpenTravel Codelist Unit of measure (UOM).
../Measurement/Units	1		Decimal	Used in conjunction with UnitOfMeasure, Units allow for determining the price of a product sold by a specific measurement For example, an item sold by ounces would have a Quantity of 1, with the Unit being the weight of the item in



				ounces, and the UnitOfMeasure as "ounces"
../SaleItem/Employees	0..1		Object	A collection of employees associated with the sale item
../Employees/Employee	1..n		EmployeeType	An employee associated with a sale item
../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: <ul style="list-style-type: none"> • Approver • Originator
../SaleItem/ProductDescription	0..1		String	A description of the sale item
../SaleItem/ReferenceIDs	0..1		ReferenceID_Type	A collection of IDs to identify the object on the system (e.g. UPC)
../ReferenceIDs/ReferenceID	1..n		Array	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceID/ID	1		String	ID of the reference
../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
../SaleItem/SeatNumber	0..n		String	The seat number to which this sale item belongs
../SaleItem/LineItemID	0..1		String	The unique ID of the line item used to reference the sale item in the check context
../SaleItem/VendorProductCode	0..1		String	Identifier for product from vendor, usually only for retail
../SaleItem/Cost	0..1		Decimal	Extended cost of the sale item (cost multiplied by quantity)
../SaleItem/Comments	0..1		CommentType	Comments related to the sale item; this is entered by the employee making the sale
../Comments/Comment	1..n		Array	A single comment within a collection of comments
../Comment/TimeStamp	0..1		DateTime	The date and time this comment was created encoded as ISO 8601
../Comment/Text	1		String	The comment
../Comment/Type	0..1		String	Identifies the type of comment (e.g. void reason)
PriceModifiers	0..1		Object	A collection of discounts or other items that modified the final total

../PriceModifiers/PriceModifier	0..n		Array of PriceModifierType	A discount or other item that modified the final total.
../PriceModifier/ID	1		String	Identifier of price modifier in source system. If the ID is not available, the name should be repeated in this field.
../PriceModifier/Name	1		String	Name of price modifier/discount
../PriceModifier/Code	1		String	A code that identifies the type of modifier/discount.
../PriceModifier/DatePosted	1		DateTime	When price modifier or discount was added to transaction, if available. If not, same as date_posted value on transaction encoded as ISO 8601.
../PriceModifier/BusinessDate	0..1		Date	The business date for the price modifier.
../PriceModifier/Status	0..1		String Enumeration	Final status of price modifier/discount Available options: <ul style="list-style-type: none"> • Sale • Cancel • Void • Return
../PriceModifier/StatusComment	0..1		String	A comment entered by the employee related to a change in the status (e.g. a void reason code)
../PriceModifier/Amount	1		Decimal	Amount of modifier or discount
../PriceModifier/Currency	0..1		CurrencyCodeType	Specifies the currency for the amount if different from currency in metadata
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../PriceModifier/IncludedInd	1		Boolean	When true, the discount has already been applied to the line item(s)
../PriceModifier/Employees	0..1		Object	A collection of employees related to the price modifier
../Employees/Employee	0..n		EmployeeType	An employee related to the item
../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options:



				<ul style="list-style-type: none"> • Approver • Originator
../PriceModifier/BasisItems	0..1		Object	A collection of items to which this PriceModifier applies
../BasisItems/BasisItem	1..n		Array of BasisItemType	Specifies the item (e.g. SaleItem, SaleItemModifier) to which the expressed amount applies
../BasisItem/Type	1		String Enumeration	Specifies the type of the basis item Available options: <ul style="list-style-type: none"> • Lineltem • SaleItem • SaleItemModifier • Feeltem • TaxItem
../BasisItem/ID	1		String	The ID of the basis item
../PriceModifier/ReferenceIDs	0..1		ReferenceID_Type	A collection of IDs to identify the object on the system
../ReferenceIDs/ReferenceID	1..n		Array	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceID/ID	1		String	ID of the reference
../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
../PriceModifier/Comments	0..1		CommentType	A comment related to the price modifier; this is entered by the employee making the sale
../Comments/Comment	1..n		Array	A single comment within a collection of comments
../Comment/TimeStamp	0..1		DateTime	The date and time this comment was created encoded as ISO 8601
../Comment/Text	1		String	The comment
../Comment/Type	0..1		String	Identifies the type of comment (e.g. void reason)
Feeltems	0..1		Object	Fees charged on the transaction
../Feeltems/Feeltem	0..n		Array of FeeTaxType	A fee charged on the transaction
../Feeltem/ID	1		String	The ID for the fee or tax If the ID is not available, the name should be repeated in this field

../Feeltem/Name	1		String	Name of the of the tax or fee; if not available, default with tax or fee ID
../Feeltem/DatePosted	1		DateTime	The date the tax or fee was added to transaction, if available If not, same as Date Posted value on transaction encoded as ISO 8601
../Feeltem/Amount	0..1		Decimal	The amount
../Feeltem/Currency	0..1		CurrencyCodeType	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../Feeltem/IncludedInd	0..1		Boolean	When true, this fee or tax item is included as part of the amount
../Feeltem/Employees	0..1		Object	A collection of employees related to the fee or tax item
../Employees/Employee	0..n		Array of EmployeeType	An employee related to the item
../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: <ul style="list-style-type: none"> • Approver • Originator
../Feeltem/Type	0..1		String	Specifies the type of tax or fee (e.g. sales tax, excise tax)
../Feeltem/BasisItems	0..1		Object	A collection of items to which this Fee or Tax applies
../BasisItems/BasisItem	0..n		Array of BasisItemType	Specifies the item (e.g. SaleItem, SaleItem Modifier) to which the expressed amount applies
../BasisItem/Type	1		String Enumeration	Specifies the type of the basis item Available options: <ul style="list-style-type: none"> • Lineltem • SaleItem • SaleItemModifier • Feeltem • TaxItem
../BasisItem/ID	1		String	The ID of the basis item



../FeelItem/ReferenceIDs	0..1		ReferenceID_Type	A collection of IDs to identify a tax or fee in another system
../ReferenceIDs/ReferenceID	1..n		Array	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceID/ID	1		String	ID of the reference
../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
../FeelItem/Status	1		String Enumeration	The status of sale item on transaction Available options: <ul style="list-style-type: none"> • Sale • Cancel • Void • Return
../FeelItem/StatusComment	0..1		String	A comment entered by the employee related to a change in the status (e.g. a void reason code)
../FeelItem/Comments	0..1		CommentType	A comment related to the fee item; this is entered by the employee making the sale
../Comments/Comment	1..n		Array	A single comment within a collection of comments
../Comment/TimeStamp	0..1		DateTime	The date and time this comment was created encoded as ISO 8601
../Comment/Text	1		String	The comment
../Comment/Type	0..1		String	Identifies the type of comment (e.g. void reason)
../FeelItem/BusinessDate	0..1		Date	The business date for the fee
TaxItems	0..1		Object	Taxes charged on transaction
../TaxItems/TaxItem	0..n		Array of FeeTaxType	A fee charged on the transaction
../TaxItem/ID	1		String	The ID for the fee or tax If the ID is not available, the name should be repeated in this field
../TaxItem /Name	1		String	Name of the of the tax or fee; if not available, default with tax or fee ID
../TaxItem /DatePosted	1		DateTime	The date the tax or fee was added to transaction, if available If not, same as Date Posted value on transaction encoded as ISO 8601



../TaxItem/Amount	0..1		Decimal	The amount
../TaxItem /Currency	0..1		CurrencyCodeType	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../TaxItem /IncludedInd	0..1		Boolean	When true, this fee or tax item is included as part of the amount
../TaxItem /Employees	0..1		Object	A collection of employees related to the fee or tax item
../Employees/Employee	0..n		Array of EmployeeType	An employee related to the item
../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: <ul style="list-style-type: none"> • Approver • Originator
../TaxItem /Type	0..1		String	Specifies the type of tax or fee (e.g. sales tax, excise tax)
../TaxItem /BasisItems	0..1		Object	A collection of items to which this Fee or Tax applies
../BasisItems/BasisItem	0..n		Array of BasisItemType	Specifies the item (e.g. SaleItem, SaleItem Modifier) to which the expressed amount applies
../BasisItem/Type	1		String Enumeration	Specifies the type of the basis item Available options: <ul style="list-style-type: none"> • LineItem • SaleItem • SaleItemModifier • FeeItem • TaxItem
../BasisItem/ID	1		String	The ID of the basis item
../TaxItem /ReferenceIDs	0..1		ReferenceID_Type	A collection of IDs to identify a tax or fee in another system
../ReferenceIDs/ReferenceID	1..n		Array	A string that uniquely identifies the system that uses the reference; for example, the specific OTA
../ReferenceID/ID	1		String	ID of the reference

../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
Total	1		TotalType	The grand total of all sales less discounts, this is no the balance of the transaction
../Total/AmountBeforeTax	0..1		Decimal	The total amount of the transaction before tax This may be a partial total if the check is split between multiple parties
../Total/AmountAfterTax	1		Decimal	The total amount of the transaction after tax This may be a partial total if the check is split between multiple parties
../Total/Currency	0..1		CurrencyCodeType	Specifies the currency for the total amount if different from currency in metadata
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
TenderItems	0..1		Object	Payments on the transaction
../TenderItems/TenderItem	1..n		Array of TenderItemType	A payment on a transaction
../TenderItem/ID	1		String	Identifier of the tender in source system If the ID is not available the name should be repeated in this field
../TenderItem/Name	1		String	Name of tender (e.g. Visa, Mastercard, Amex, Hilton Honors, Marriott Bonvoy, Room Number, PayPal, Alipay, WeChat Pay, etc.)
../TenderItem/TypeCategory	1		String	Name of tender (e.g. Visa, Mastercard, Amex, Hilton Honors, Marriott Bonvoy, Room Number, PayPal, Alipay, WeChat Pay, etc.)
../TenderItem/DatePosted	1		DateTime	When payment was added to transaction, if available If not, same as DatePosted value on transaction encoded as ISO 8601
../TenderItem/BusinessDate	0..1		Date	The business date for the tender item



../TenderItem/Amount	1		Decimal	Amount charged for this payment type
../TenderItem/Currency	0..1		CurrencyCodeType	Specifies the currency code and decimal places for the amount in the case where the currency code in the metadata is being overridden
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../TenderItem/TypeIdentifier	0..1		String	Specifies the room number or loyalty ID
../TenderItem/LastFour	0..1		String (Restricted to exactly 4 characters)	Last four numbers of the credit card used, if available
../TenderItem/CardPresentInd	0..1		Boolean	When true, the card was present
../TenderItem/AuthorizationCode	0..1		String	If credit, an authorization identifier returned by the payment provider
../TenderItem/ManualRetrieveInd	0..1		Boolean	When true the authorization code was manually retrieved When false, the approval was electronically retrieved
../TenderItem/GatewayMessage	0..1		String	Detailed information from the gateway about the status of the payment, if available
../TenderItem/PaymentStatus	0..1		String Enumeration	Status of the payment, if available. Available options: <ul style="list-style-type: none"> • Authorized • Canceled • Completed • Declined • Error • Refunded • Void
../TenderItem/PaymentStatusComment	0..1		String	A comment entered by the employee related to a change in the status (e.g. a void reason code)
../TenderItem/ChargeTip	0..1		Decimal	Amount of tip added to payment
../TenderItem/Employees	0..1		EmployeeType	Employee related to the payment
../Employees/Employee	0..n		Array	An employee related to item

../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: <ul style="list-style-type: none"> • Approver • Originator
../TenderItem/ReferenceIDs	0..1		ReferenceID_Type	A collection of IDs to identify the object on the system
../ReferenceIDs/ReferenceID	1..n		Array	A collection of IDs to identify the object on the system
../ReferenceID/ID	1		String	ID of the reference
../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
Deliveries	0..1		Object	A collection of delivery information; delivery includes both delivery or shipping of one or more sale items
../Deliveries/Delivery	1..n		Array of DeliveryType	Delivery information related to the transaction for one or more sale items
../Delivery/Amount	0..1		Decimal	Price of delivery/shipping for transaction charged to the customer
../Delivery/Currency	0..1		CurrencyCodeType	Specifies the currency for the amount if different from the currency in metadata
../Currency/CurrencyCode	1		String	An ISO 4217 (3) alpha character code that specifies a monetary unit
../Currency/DecimalPlaces	1		NonNegativeInteger	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency
../Delivery/ShippingDate	0..1		DateTime	The date that the item(s) was shipped encoded as ISO 8601
../Delivery/DesiredDeliveryTime	0..1		DateTime	The date and time the customer would like the order to be delivered This is not a system generated time, but a customer request If no time is indicated it is assumed that the order should be delivered as soon as it is ready
../Delivery/ActualDeliveryTime	1		DateTime	The date and time the order was delivered
../Delivery/Fulfillment	0..1		String Enumeration	Specifies the fulfillment method how the customer is to receive the goods



				Available options: <ul style="list-style-type: none"> • ShipToStore • DropShip • PickupFromStore • ShipToCustomer
../Delivery/SaleItemIDs	0..1		Object	One or more sale items IDs that make up this delivery
../SaleItemIDs/SaleItemID	0..n		String	A sale item ID for an item that is part of this delivery
Delivery/Customer	0..n		Array	Information about a customer of this transaction
../Customer/CustomerName	0..1		CustomerName Type	Detailed name information for the customer
../CustomerName/GivenName	0..1		String	Given name, first name or names
../CustomerName/Surname	0..1		String	Family name or last name; this may also be used for a full name if the sending system does not have the ability to separate a full name into its parts (e.g. the surname element may be used to pass the full name)
../CustomerName/Name	0..1		String	Name of the customer; used if the sending system does not have the ability to separate the full name into its parts (e.g. given name and surname)
../CustomerName/DeletedInd	0..1		Boolean	When true, the customer is deleted from the source system
../Customer/CompanyName	0..1		String	The name of the company with whom the customer is employed
../Customer/Address	0..n		Array of AddressType	Detailed information on an address for the customer
../Address/FormattedInd	0..1		Boolean	When true, the address is formatted and uses the specific address fields When false, the address is unformatted and is sent in the AddressLine elements
../Address/Type	0..1		String Enumeration	Specifies the type of address Available values: <ul style="list-style-type: none"> • Home • Business
../Address/UseType	0..1		String Enumeration	Describes the use of the address



				Available values: <ul style="list-style-type: none"> Billing Delivery
../Address/AddressLines	0..1		Object	When the address is unformatted (FormattedInd="false") these lines will contain free form address details
../AddressLines/AddressLine	0..5		String	When the address is formatted and street number and street name must be sent independently, the street number will be sent using StreetNmbr, and the street name will be sent in the first AddressLine occurrence
../Address/CityName	0..1		String	City (e.g., Dublin), town or postal station (i.e. a postal service territory, often used in a military address)
../Address/PostalCode	0..1		String	Post Office Code number
../Address/County	0..1		String	County or Region Name (e.g. Fairfax)
../Address/StateProv	0..1		String	State or Province name (e.g. Texas)
../Address/CountryCode	0..1		String	A code identifying the country for the address - ISO Code 3166 Alpha 2
../Customer/Telephones	0..n		Array	A collection of telephone numbers for the customer
../Telephones/PhoneNumber	0..1		String	Customer phone number
../Telephones/Type	0..1		String	Customer phone type (e.g. mobile, fax).
../Customer/Email	0..1		String	Email address for the customer
../Delivery/ReferenceIDs	0..1		ReferenceID_Type	Used to identify the carrier, tracking reference and other identifiers related to the shipment
../ReferenceIDs/ReferenceID	1..n		Array	A collection of IDs to identify the object on the system
../ReferenceID/ID	1		String	ID of the reference
../ReferenceID/Type	1		String	Specifies the type of reference
../ReferenceID/SystemName	1		String	The name or ID of the referenced system
../Delivery/Comments	0..1		CommentType	A collection of comments that apply to the transaction level
../Comments/Comment	1..n		Object	A single comment within a collection of comments
../Comment/TimeStamp	0..1		DateTime	The date and time this comment was created encoded as ISO 8601
../Comment/Text	1		String	The comment

../Comment/Type	0..1		String	Identifies the type of comment (e.g. void reason)
Comments	0..1		CommentType	A collection of comments that apply to the transaction level
../Comments/Comment	1..n		Object	A single comment within a collection of comments
../Comment/TimeStamp	0..1		DateTime	The date and time this comment was created encoded as ISO 8601
../Comment/Text	1		String	The comment
../Comment/Type	0..1		String	Identifies the type of comment (e.g. void reason)

4.4.1 Global Sample Message: XML

The following is a sample Point of Sale message in XML format. This message is not an example of a particular use case, but simply showing an example of the data format for each field.

```
<HTNG_PointOfSaleCheckNotifRQ xsi:schemaLocation="http://htng.org/2021A
HTNG_PointOfSaleCheckNotifRQ.xsd" xmlns="http://htng.org/2021A"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <MetadataInformation>
    <Metadata>text</Metadata>
    <TimeStamp>2001-12-17T09:30:47Z</TimeStamp>
    <Language>en-us</Language>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <TransactionStatus>Closed</TransactionStatus>
    <Location>
      <ID>BER0164F</ID>
      <Name>Sheraton Marquis Hotel</Name>
      <ChainCode>0127US</ChainCode>
      <BrandCode>SHER1MAR</BrandCode>
    </Location>
  </MetadataInformation>
  <TransactionID>BER0164F2021011709304745010</TransactionID>
  <ReferenceIDs>
    <ReferenceID>
      <ID>String</ID>
      <Type>String</Type>
      <SystemName>String</SystemName>
    </ReferenceID>
  </ReferenceIDs>
  <AdditionalReferences>
```



```
<AdditionalReference>
  <ID>String</ID>
  <Type>String</Type>
  <SubType>String</SubType>
  <SystemName>String</SystemName>
  <Name>String</Name>
</AdditionalReference>
</AdditionalReferences>
<SourceSystem>Symphony2</SourceSystem>
<Outlet>
  <ID>160</ID>
  <Name>Room Service</Name>
  <TerminalID>BER0164RS01</TerminalID>
  <TerminalDescription>Room Service 01</TerminalDescription>
  <TableNumber>3016</TableNumber>
</Outlet>
<Customers>
  <Customer>
    <CustomerName>
      <GivenName>John</GivenName>
      <Surname>Doe</Surname>
      <Name>John Doe</Name>
      <DeletedInd>>false</DeletedInd>
    </CustomerName>
    <CompanyName>MyCompany</CompanyName>
    <Address>
      <FormattedInd>>true</FormattedInd>
      <Type>Business</Type>
      <UseType>Billing</UseType>
      <AddressLines>
        <AddressLine>Main Street 123</AddressLine>
      </AddressLines>
      <CityName>Hometown</CityName>
      <PostalCode>012345</PostalCode>
      <County>Saxony</County>
      <StateProv>MS</StateProv>
      <CountryCode>US</CountryCode>
    </Address>
    <Telephones>
      <PhoneNumber>(123) 456-7890</PhoneNumber>
      <Type>Mobile</Type>
    </Telephones>
    <Email>MyEmail@emailprovider.com</Email>
  </Customer>
</Customers>
<LoyaltyPrograms>
  <Loyalty>
    <ID>0123456789</ID>
    <ProgramID>StarwoodPreferredGuest</ProgramID>
```



```
<Level>Gold</Level>
  <MemberName>John Doe</MemberName>
</Loyalty>
</LoyaltyPrograms>
<DateOpened>2021-01-17T10:20:20Z</DateOpened>
<DateClosed>2021-01-17T10:20:20Z</DateClosed>
<DatePosted>2021-01-17T10:20:20Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<Destination>Counter</Destination>
<OrderType>Dine_In</OrderType>
<CheckNumber>45010</CheckNumber>
<CheckStatus>Sale</CheckStatus>
<CustomerCount>
  <Total>3</Total>
  <AgeDemographics>
    <AgeDemographic>
      <Type>Adult </Type>
      <Count>2</Count>
    </AgeDemographic>
    <AgeDemographic>
      <Type>Child</Type>
      <Count>1</Count>
    </AgeDemographic>
  </AgeDemographics>
</CustomerCount>
<EmployeeInfos>
  <EmployeeInfo>
    <EmployeeID>9026800017</EmployeeID>
    <GivenName>Matthias</GivenName>
    <Surname>Heyde</Surname>
    <ClockInfos>
      <ClockInfo>
        <ClockInTime>2021-01-17T06:49:47Z</ClockInTime>
        <ClockOutTime>2021-01-17T15:09:44Z</ClockOutTime>
        <Shift>Breakfast</Shift>
      </ClockInfo>
    </ClockInfos>
  </EmployeeInfo>
  <EmployeeInfo>
    <EmployeeID>9026800012</EmployeeID>
    <GivenName>Jane </GivenName>
    <Surname>Smith</Surname>
    <ClockInfos>
      <ClockInfo>
        <ClockInTime>2021-01-17T06:49:47Z</ClockInTime>
        <ClockOutTime>2021-01-17T12:09:44Z</ClockOutTime>
        <Shift>Early</Shift>
      </ClockInfo>
    </ClockInfos>
  </EmployeeInfo>
</EmployeeInfos>
```




```
<ClockInTime>2021-01-17T17:49:47Z</ClockInTime>
<ClockOutTime>2021-01-17T22:09:44Z</ClockOutTime>
<Shift>Dinner</Shift>
</ClockInfo>
</ClockInfos>
</EmployeeInfo>
</EmployeeInfos>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
  <Employee>
    <EmployeeID>9026800012</EmployeeID>
    <Role>Approver</Role>
  </Employee>
</Employees>
<Order>
  <Source>
    <ReferenceID>
      <ID>String</ID>
      <Type>String</Type>
      <SystemName>String</SystemName>
    </ReferenceID>
  </Source>
  <CreatedDateTime>2021-01-17T10:20:20Z</CreatedDateTime>
  <LastModified>2021-01-17T10:20:20Z</LastModified>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <Status>ReadyForPickup</Status>
</Order>
<SaleItems>
  <SaleItem>
    <ID>11200034</ID>
    <Name>Cheese Burger</Name>
    <Categories>
      <Category>
        <Name>Sandwich</Name>
        <ID>112</ID>
        <Type>Family Group</Type>
      </Category>
      <Category>
        <Name>Food</Name>
        <ID>1</ID>
        <Type>Major Group</Type>
      </Category>
    </Categories>
  </SaleItem>
</SaleItems>
```



```
</Category>
</Categories>
<DatePosted>2021-01-17T10:20:20Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<Status>Sale</Status>
<StatusComment>String</StatusComment>
<Amount>12.00</Amount>
<Currency>
  <CurrencyCode>USD</CurrencyCode>
  <DecimalPlaces>2</DecimalPlaces>
</Currency>
<Modifiers>
  <Modifier>
    <ID>998000123</ID>
    <Name>Add Bacon</Name>
    <Categories>
      <Category>
        <Name>Add-On</Name>
        <ID>998</ID>
        <Type>Family Group</Type>
      </Category>
      <Category>
        <Name>Food</Name>
        <ID>1</ID>
        <Type>Major Group</Type>
      </Category>
    </Categories>
    <DatePosted>2021-01-17T10:20:20Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Status>Sale</Status>
    <StatusComment>String</StatusComment>
    <Amount>1.50</Amount>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <IncludedInd>>false</IncludedInd>
    <Quantity>1</Quantity>
    <Measurement>
      <UnitOfMeasure>0</UnitOfMeasure>
      <Units>0.0</Units>
    </Measurement>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <ProductDescription>Additional BAcon Topping</ProductDescription>
```



```
<ReferenceIDs>
  <ReferenceID>
    <ID>FOODTEA01</ID>
    <Type>Procurement</Type>
    <SystemName>MyInventory</SystemName>
  </ReferenceID>
</ReferenceIDs>
<LineItemID>2</LineItemID>
<VendorProductCode>IBWA1936</VendorProductCode>
<Cost>.25</Cost>
<Comments>
  <Comment>
    <TimeStamp>2021-01-17T10:20:20Z</TimeStamp>
    <Text>Cook Bacon Well Done</Text>
    <Type>Comment</Type>
  </Comment>
</Comments>
</Modifier>
</Modifiers>
<Quantity>1</Quantity>
<TaxExemptInd>>false</TaxExemptInd>
<Measurement>
  <UnitOfMeasure>0</UnitOfMeasure>
  <Units>0.0</Units>
</Measurement>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<ProductDescription>Cheese Burger with letters, tomato and Cheddar
Cheese</ProductDescription>
<ReferenceIDs>
  <ReferenceID>
    <ID>MIBurger63</ID>
    <Type>Procurement</Type>
    <SystemName>MyInventory</SystemName>
  </ReferenceID>
</ReferenceIDs>
<SeatNumber>1</SeatNumber>
<LineItemID>1</LineItemID>
<VendorProductCode>String</VendorProductCode>
<Cost>1.35</Cost>
<Comments>
  <Comment>
    <TimeStamp>2021-01-17T08:37:20Z</TimeStamp>
    <Text>Swiss Cheese instead of Cheddar Cheese</Text>
    <Type>Comment</Type>
  </Comment>
</Comments>
```



```
    </Comment>
  </Comments>
</SaleItem>
</SaleItems>
<PriceModifiers>
  <PriceModifier>
    <ID>3191</ID>
    <Name>10% Early Discount</Name>
    <Code>Discount</Code>
    <DatePosted>2021-01-17T09:30:47Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Status>Sale</Status>
    <StatusComment>String</StatusComment>
    <Amount>4.76</Amount>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <IncludedInd>true</IncludedInd>
    <Employees>
      <Employee>
        <EmployeeID>9026800012</EmployeeID>
        <Role>Approver</Role>
      </Employee>
    </Employees>
  </PriceModifier>
</PriceModifiers>
<FeeItems>
  <FeeItem>
    <ID>110</ID>
    <Name>20% Service Charge</Name>
    <DatePosted>2021-01-17T02:55:20Z</DatePosted>
    <Amount>6.80</Amount>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <IncludedInd>true</IncludedInd>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <Type>Service Charge</Type>
    <BasisItems>
      <BasisItem>
        <Type>LineItem</Type>
        <ID>1</ID>
      </BasisItem>
    </BasisItems>
  </FeeItem>
</FeeItems>
```



```
    </BasisItem>
  </BasisItems>
  <ReferenceIDs>
    <ReferenceID>
      <ID>String</ID>
      <Type>String</Type>
      <SystemName>String</SystemName>
    </ReferenceID>
  </ReferenceIDs>
  <Status>Sale</Status>
  <StatusComment>String</StatusComment>
  <BusinessDate>2021-01-17</BusinessDate>
</FeeItem>
</FeeItems>
<TaxItems>
  <TaxItem>
    <ID>1001</ID>
    <Name>16% State Tax</Name>
    <DatePosted>2021-01-17T02:55:20Z</DatePosted>
    <Amount>7.33</Amount>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <IncludedInd>>false</IncludedInd>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <Type>Add-On Sales Tax</Type>
    <BasisItems>
      <BasisItem>
        <Type>TaxItem</Type>
        <ID>String</ID>
      </BasisItem>
    </BasisItems>
    <ReferenceIDs>
      <ReferenceID>
        <ID>String</ID>
        <Type>String</Type>
        <SystemName>String</SystemName>
      </ReferenceID>
    </ReferenceIDs>
  </TaxItem>
</TaxItems>
<Total>
  <AmountBeforeTax>45.80</AmountBeforeTax>
```



```
<AmountAfterTax>53.13</AmountAfterTax>
<Currency>
  <CurrencyCode>USD</CurrencyCode>
  <DecimalPlaces>2</DecimalPlaces>
</Currency>
</Total>
<TenderItems>
  <TenderItem>
    <ID>8012</ID>
    <Name>Visa</Name>
    <TypeCategory>Visa Card</TypeCategory>
    <DatePosted>2021-01-17T10:20:20Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Amount>154.28</Amount>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <TypeIdentifier>0123456789</TypeIdentifier>
    <LastFour>6789</LastFour>
    <CardPresentInd>>false</CardPresentInd>
    <AuthorizationCode>98702B</AuthorizationCode>
    <ManualRetrievalInd>>false</ManualRetrievalInd>
    <GatewayMessage>String</GatewayMessage>
    <PaymentStatus>Authorized</PaymentStatus>
    <PaymentStatusComment>String</PaymentStatusComment>
    <ChargeTip>1.87</ChargeTip>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <ReferenceIDs>
      <ReferenceID>
        <ID>String</ID>
        <Type>String</Type>
        <SystemName>String</SystemName>
      </ReferenceID>
    </ReferenceIDs>
  </TenderItem>
</TenderItems>
<Deliveries>
  <Delivery>
    <Amount>12.34</Amount>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
```



```
<ShippingDate>2021-01-17T10:20:20Z</ShippingDate>
<DesiredDeliveryTime>2021-01-19T10:00:00Z</DesiredDeliveryTime>
<ActualDeliveryTime>2021-01-19T10:00:00Z</ActualDeliveryTime>
<Fulfillment>ShipToCustomer</Fulfillment>
<SaleItemIDs>
  <SaleItemID>String</SaleItemID>
</SaleItemIDs>
<Customer>
<CustomerName>
  <GivenName>John</GivenName>
  <Surname>Doe</Surname>
  <Name>John Doe</Name>
  <DeletedInd>>false</DeletedInd>
</CustomerName>
<CompanyName>MyCompany</CompanyName>
<Address>
  <FormattedInd>>true</FormattedInd>
  <Type>Business</Type>
  <UseType>Billing</UseType>
  <AddressLines>
    <AddressLine>Main Street 123</AddressLine>
  </AddressLines>
  <CityName>Hometown</CityName>
  <PostalCode>012345</PostalCode>
  <County>Saxony</County>
  <StateProv>MS</StateProv>
  <CountryCode>US</CountryCode>
</Address>
<Telephones>
  <PhoneNumber>(123) 456-7890</PhoneNumber>
  <Type>Mobile</Type>
</Telephones>
<Email>MyEmail@emailprovider.com</Email>
</Customer>
<ReferenceIDs>
  <ReferenceID>
    <ID>String</ID>
    <Type>String</Type>
    <SystemName>String</SystemName>
  </ReferenceID>
</ReferenceIDs>
<Comments>
  <Comment>
    <TimeStamp>2021-01-17T10:20:20Z</TimeStamp>
    <Text>Here is a comment to the Delivery</Text>
    <Type>Comment</Type>
  </Comment>
</Comments>
</Delivery>
```



```

</Deliveries>
<Comments>
  <Comment>
    <TimeStamp>2021-01-17T10:20:20Z</TimeStamp>
    <Text>Here is a comment to this check</Text>
    <Type>Comment</Type>
  </Comment>
</Comments>
</HTNG_PointOfSaleCheckNotifRQ>

```

4.4.2 Global Sample Message: JSON

The following is a sample Point of Sale message in JSON format. This message does not include all of the available fields, but is an example of what a message might look like. You may also find the Open API 3.0 JSON Schema useful that is included with the specification download.

```

{
  "HTNG_PointOfSaleNotifRQ": {
    "MetadataInformation": {
      "TimeStamp": "2021-01-17T09:30:47Z",
      "Location": {
        "ID": "BER0164F",
        "Name": "Sheraton Marquis Hotel",
        "ChainCode": "0127US",
        "BrandCode": "SHER1MAR"
      },
      "TransactionStatus": "Closed",
      "Currency": {
        "DecimalPlaces": 2,
        "CurrencyCode": "EUR"
      },
      "Language": "EN"
    },
    "TransactionID": "BER0164F2021011709304745011",
    "SourceSystem": "Symphony2",
    "Outlet": {
      "ID": 057,
      "Name": "Sports Bar",
      "TerminalID": "BER0164FSB02",
      "TerminalDescription": "Sports Bar 02",
      "TableNumber": "10"
    },
    "DateOpened": "2021-01-17T08:37:20Z",
    "DateClosed": "2021-01-17T09:30:47Z",
    "DatePosted": "2021-01-17T09:30:47Z",
    "BusinessDate": "2021-01-17",
    "OrderType": "Dine-In",
    "CheckNumber": "45011",
  }
}

```




```
"CheckStatus": "Sale",
"CustomerCount": {
  "Total": 2,
  "AgeDemographic": [{
    "Type": "Adult",
    "Count": 2
  }
]
},
"EmployeeInfos": [{
  "EmployeeID": "9026800017",
  "GivenName": "Matthias",
  "Surname": "Heyde",
  "ClockInfos": [{
    "ClockInTime": "2021-01-17T06:49:47Z",
    "ClockOutTime": "2021-01-17T15:09:44Z",
    "Shift": ["Breakfast"]
  }
]
}, {
  "EmployeeID": "9026800012",
  "GivenName": "Jane",
  "Surname": "Smith",
  "ClockInfos": [{
    "ClockInTime": "2021-01-17T07:03:47Z",
    "ClockOutTime": "2021-01-17T16:50:44Z",
    "Shift": ["Early"]
  }
]
}
],
"Employees": [{
  "EmployeeID": "9026800017",
  "Role": "Originator"
}, {
  "EmployeeID": "9026800012",
  "Role": "Approver"
}
],
"SaleItems": [{
  "ID": "40000002",
  "Name": "Draft Beer",
  "Categories": [{
    "ID": "401",
    "Type": "Family Group",
    "Name": "Beer"
  }
], {
  "ID": "2",
  "Name": "Beer",
```



```
        "Type": "Major Group"
      }
    ],
    "DatePosted": "2021-01-17T08:37:20Z",
    "BusinessDate": "2021-01-17",
    "Status": "Sale",
    "Amount": 20,
    "Quantity": 2,
    "TaxExemptInd": false,
    "Employees": [{
      "EmployeeID": "9026800017",
      "Role": "Originator"
    }
  ],
  "ProductDescription": "House Draft Beer",
  "ReferenceIDs": [{
    "ID": "BEVBEER03",
    "Type": "Procurement",
    "SystemName": "MyInventory"
  }
],
  "SeatNumber": [
    "1",
    "2"
  ],
  "VendorProductCode": "IBBE013",
  "LineItemID": "1",
  "Cost": 5
}, {
  "ID": "11200034",
  "Name": "Cheese Burger",
  "Categories": [{
    "ID": "112",
    "Type": "Family Group",
    "Name": "Sandwich"
  }], {
    "ID": "1",
    "Name": "Food",
    "Type": "Major Group"
  }
],
  "DatePosted": "2021-01-17T08:45:10Z",
  "BusinessDate": "2021-01-17",
  "Status": "Sale",
  "Amount": 25,
  "Modifiers": [{
    "ID": "998000123",
    "Name": "Add Bacon",
    "Categories": [{
```



```
        "Name": "Add-On",
        "ID": "998",
        "Type": "Family Group"
    }, {
        "ID": "1",
        "Type": "Major Group",
        "Name": "Food"
    }
],
"DatePosted": "2021-01-17T08:45:10Z",
"BusinessDate": "2021-01-17",
"Status": "Sale",
"Amount": 2,
"IncludedInd": true,
"Quantity": 1,
"Employees": [{
    "EmployeeID": "9026800017",
    "Role": "Originator"
}
],
"ProductDescription": "Bacon Topping",
"ReferenceIDs": [{
    "ID": "MIBacon",
    "Type": "Procurement",
    "SystemName": "MyInventory"
}
],
"VendorProductCode": "125BA",

"Cost": 0.5,
"Comments": [{
    "TimeStamp": "2021-01-17T08:37:20Z",
    "Text": "Cook Bacon crispy",
    "Type": "Comment"
}
]
}
],
"Quantity": 1,
"TaxExemptInd": false,
"Employees": [{
    "EmployeeID": "9026800017",
    "Role": "Originator"
}
],
"ProductDescription": "Cheese Burger with letters, tomato and Cheddar Cheese",
"ReferenceIDs": [{
    "ID": "MIBurger63",
    "Type": "Procurement",
```



```
        "SystemName": "MyInventory"
      }
    ],
    "SeatNumber": ["2"],
    "LineItemID": "2"
  }
],
"PriceModifier": [{
  "ID": "3191",
  "Name": "10% Frequent guest",
  "Code": "Discount",
  "DatePosted": "2021-01-17T09:30:47Z",
  "BusinessDate": "2021-01-17",
  "Status": "Sale",
  "StatusComment": "Frequent guest gold card 0123456789",
  "Amount": 4.5,
  "IncludedInd": false,
  "Employees": [{
    "EmployeeID": "9026800012",
    "Role": "Approver"
  }
]
}
],
"TaxItem": [{
  "ID": "101",
  "Name": "19% Sales Tax",
  "DatePosted": "2021-01-17T09:30:47Z",
  "Amount": 6.47,
  "IncludedInd": true,
  "Employees": [{
    "EmployeeID": "9026800017",
    "Role": "Originator"
  }
]
},
"Type": "Tax"
}
],
"Total": {
  "AmountBeforeTax": 34.03,
  "AmountAfterTax": 40.5
},
"TenderItems": [{
  "ID": "1000",
  "Name": "Cash",
  "TypeCategory": "Cash",
  "DatePosted": "2021-01-17T09:30:47Z",
  "BusinessDate": "2021-01-17",
  "Amount": 42.5,
```



```

    "ChargeTip": 2,
    "Employees": [{
      "EmployeeID": "9026800017",
      "Role": "Originator"
    }
  ]
}

```

4.4.3 Global Sample Message: XML

The following is a sample Point of Sale message for the particular scenario described below.

4.4.3.1 Scenario

A family of two adults and one child are dining at a sports bar, each ordering different items.

4.4.3.2 Specifics covered in the example message:

Definition	Location	Comments
Multiple Age Demographics	CustomerCount	
Multiple Employees	EmployeeInfos_EmployeeInfo Employees_Employee	Originator and Approver for the discount
Sale Items with multiple seats	SaleItems/SaleItem/LinItemID 1	
Sale Items with Modifiers	SaleItems/SaleItem/LinItemID 3,6	
Sale Items with Comments	SaleItems/SaleItem/LinItemID 5	
Sale Items with Void	SaleItems/SaleItem/LinItemID 10 ReferenceIDs/ReferenceID2	The ReferenceID is linked to the SaleItem/LinItem (9) which has to be voided This scenario shows that the waiter voided the item and the manager approved the void
Sale Items with Measurement	SaleItems/SaleItem/LinItemID 11	The cheese is configured with a KG price of 4000
Check with a Check Discount of 10 %	PriceModifiers/PriceModifier	This scenario shows a frequent guest discount, the comment field holds information of the guest discount card.



The Discount does not discount the Tax which is to be paid	PriceModifiers_PriceModifier	
Cash Payment	TenderItems_TenderItem	

4.4.3.3 Financial Overview

Total	19% Tax	Net Before Discount	Net After Discount-10%	Gross After Discount	Net After Discount	Tip Amount
58.80	11.17	47.63	42.87	54.04	42.87	10.96

4.4.3.4 Sample XML message

The following is a sample Point of Sale message in XML format:

```
<HTNG_PointOfSaleCheckNotifRQ xsi:schemaLocation="http://htng.org/2021A
HTNG_PointOfSaleCheckNotifRQ.xsd" xmlns="http://htng.org/2021A"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <MetadataInformation>
    <TimeStamp>2021-01-17T09:30:47Z</TimeStamp>
    <Language>en-us</Language>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <TransactionStatus>Closed</TransactionStatus>
    <Location>
      <ID>BER0164F</ID>
      <Name>Sheraton Marquis Hotel</Name>
      <ChainCode>0127US</ChainCode>
      <BrandCode>SHER1MAR</BrandCode>
    </Location>
  </MetadataInformation>
  <TransactionID>BER0164F2021011709304745011</TransactionID>
  <SourceSystem>Symphony2</SourceSystem>
  <Outlet>
    <ID>057</ID>
    <Name>Sports Bar</Name>
    <TerminalID>BER0164FSB02</TerminalID>
    <TerminalDescription>Sports Bar 02</TerminalDescription>
    <TableNumber>10</TableNumber>
  </Outlet>
```



```
<DateOpened>2021-01-17T08:37:20Z</DateOpened>
<DateClosed>2021-01-17T09:30:47Z</DateClosed>
<DatePosted>2021-01-17T09:30:47Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<OrderType>Dine-In</OrderType>
<CheckNumber>45011</CheckNumber>
<CheckStatus>Sale</CheckStatus>
<CustomerCount>
  <Total>3</Total>
  <AgeDemographics>
    <AgeDemographic>
      <Type>Adult </Type>
      <Count>2</Count>
    </AgeDemographic>
    <AgeDemographic>
      <Type>Child</Type>
      <Count>1</Count>
    </AgeDemographic>
  </AgeDemographics>
</CustomerCount>
<EmployeeInfos>
  <EmployeeInfo>
    <EmployeeID>9026800017</EmployeeID>
    <GivenName>Matthias</GivenName>
    <Surname>Heyde</Surname>
    <ClockInfos>
      <ClockInfo>
        <ClockInTime>2021-01-17T06:49:47Z</ClockInTime>
        <ClockOutTime>2021-01-17T15:09:44Z</ClockOutTime>
        <Shift>Breakfast</Shift>
      </ClockInfo>
    </ClockInfos>
  </EmployeeInfo>
  <EmployeeInfo>
    <EmployeeID>9026800012</EmployeeID>
    <GivenName>Jane </GivenName>
    <Surname>Smith</Surname>
    <ClockInfos>
      <ClockInfo>
        <ClockInTime>2021-01-17T07:03:47Z</ClockInTime>
        <ClockOutTime>2021-01-17T16:50:44Z</ClockOutTime>
        <Shift>Early</Shift>
      </ClockInfo>
    </ClockInfos>
  </EmployeeInfo>
</EmployeeInfos>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
```



```
<Role>Originator</Role>
</Employee>
<Employee>
  <EmployeeID>9026800012</EmployeeID>
  <Role>Approver</Role>
</Employee>
</Employees>
<SaleItems>
  <SaleItem>
    <ID>40000002</ID>
    <Name>Draft Beer</Name>
    <Categories>
      <Category>
        <Name>Beer</Name>
        <ID>401</ID>
        <Type>Family Group</Type>
      </Category>
      <Category>
        <Name>Beer</Name>
        <ID>2</ID>
        <Type>Major Group</Type>
      </Category>
    </Categories>
    <DatePosted>2021-01-17T08:37:20Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Status>Sale</Status>
    <Amount>10.00</Amount>
    <Quantity>2</Quantity>
    <TaxExemptInd>>false</TaxExemptInd>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <ProductDescription>House Draft Beer</ProductDescription>
    <ReferenceIDs>
      <ReferenceID>
        <ID>BEVBEEER03</ID>
        <Type>Procurement</Type>
        <SystemName>MyInventory</SystemName>
      </ReferenceID>
    </ReferenceIDs>
    <SeatNumber>1</SeatNumber>
    <SeatNumber>2</SeatNumber>
    <LineItemID>1</LineItemID>
    <VendorProductCode>IBBE013</VendorProductCode>
    <Cost>.97</Cost>
  </SaleItem>
</SaleItems>
```




```
<SaleItem>
  <ID>40800017</ID>
  <Name>1L Btl. Water</Name>
  <Categories>
    <Category>
      <Name>Water</Name>
      <ID>408</ID>
      <Type>Family Group</Type>
    </Category>
    <Category>
      <Name>Alc. Free Beverage</Name>
      <ID>4</ID>
      <Type>Major Group</Type>
    </Category>
  </Categories>
  <DatePosted>2021-01-17T08:37:20Z</DatePosted>
  <BusinessDate>2021-01-17</BusinessDate>
  <Status>Sale</Status>
  <Amount>6.50</Amount>
  <Quantity>1</Quantity>
  <TaxExemptInd>>false</TaxExemptInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <ProductDescription>1L Bottled Water</ProductDescription>
  <ReferenceIDs>
    <ReferenceID>
      <ID>BEVALCFREE178</ID>
      <Type>Procurement</Type>
      <SystemName>MyInventory</SystemName>
    </ReferenceID>
  </ReferenceIDs>
  <SeatNumber>2</SeatNumber>
  <LineItemID>2</LineItemID>
  <VendorProductCode>IBWA1936</VendorProductCode>
  <Cost>.64</Cost>
</SaleItem>
<SaleItem>
  <ID>40300201</ID>
  <Name>Pot Tea</Name>
  <Categories>
    <Category>
      <Name>Hot Beverage</Name>
      <ID>403</ID>
      <Type>Family Group</Type>
    </Category>
```



```
<Category>
  <Name>Food</Name>
  <ID>1</ID>
  <Type>Major Group</Type>
</Category>
</Categories>
<DatePosted>2021-01-17T08:37:20Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<Status>Sale</Status>
<Amount>4.00</Amount>
<Modifiers>
  <Modifier>
    <ID>998002028</ID>
    <Name>Camomile</Name>
    <Categories>
      <Category>
        <Name>Add-On</Name>
        <ID>998</ID>
        <Type>Family Group</Type>
      </Category>
      <Category>
        <Name>Food</Name>
        <ID>1</ID>
        <Type>Major Group</Type>
      </Category>
    </Categories>
    <DatePosted>2021-01-17T08:37:20Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Status>Sale</Status>
    <Amount>0.00</Amount>
    <IncludedInd>true</IncludedInd>
    <Quantity>1</Quantity>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <ProductDescription>Tea Choice</ProductDescription>
    <ReferenceIDs>
      <ReferenceID>
        <ID>BEVTEA17</ID>
        <Type>Procurement</Type>
        <SystemName>MyInventory</SystemName>
      </ReferenceID>
    </ReferenceIDs>
    <LineItemID>4</LineItemID>
    <VendorProductCode>125BA</VendorProductCode>
    <Cost>.11</Cost>
```



```
    </Modifier>
  </Modifiers>
  <Quantity>1</Quantity>
  <TaxExemptInd>>false</TaxExemptInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <ProductDescription>Pot of Tea</ProductDescription>
  <ReferenceIDs>
    <ReferenceID>
      <ID>FOODTEA01</ID>
      <Type>Procurement</Type>
      <SystemName>MyInventory</SystemName>
    </ReferenceID>
  </ReferenceIDs>
  <SeatNumber>3</SeatNumber>
  <LineItemID>3</LineItemID>
  <Cost>.05</Cost>
</SaleItem>
<SaleItem>
  <ID>11200034</ID>
  <Name>Cheese Burger</Name>
  <Categories>
    <Category>
      <Name>Sandwich</Name>
      <ID>112</ID>
      <Type>Family Group</Type>
    </Category>
    <Category>
      <Name>Food</Name>
      <ID>1</ID>
      <Type>Major Group</Type>
    </Category>
  </Categories>
  <DatePosted>2021-01-17T08:45:10Z</DatePosted>
  <BusinessDate>2021-01-17</BusinessDate>
  <Status>Sale</Status>
  <Amount>12.00</Amount>
  <Quantity>1</Quantity>
  <TaxExemptInd>>false</TaxExemptInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
```



```
<ProductDescription>Cheese Burger with letters, tomato and Cheddar
Cheese</ProductDescription>
  <ReferenceIDs>
    <ReferenceID>
      <ID>MIBurger63</ID>
      <Type>Procurement</Type>
      <SystemName>MyInventory</SystemName>
    </ReferenceID>
  </ReferenceIDs>
  <SeatNumber>1</SeatNumber>
  <LineItemID>5</LineItemID>
  <Cost>1.35</Cost>
  <Comments>
    <Comment>
      <TimeStamp>2021-01-17T08:37:20Z</TimeStamp>
      <Text>Swiss Cheese instead of Cheddar Cheese</Text>
      <Type>Comment</Type>
    </Comment>
  </Comments>
</SaleItem>
<SaleItem>
  <ID>11200034</ID>
  <Name>Cheese Burger</Name>
  <Categories>
    <Category>
      <Name>Sandwich</Name>
      <ID>112</ID>
      <Type>Family Group</Type>
    </Category>
    <Category>
      <Name>Food</Name>
      <ID>1</ID>
      <Type>Major Group</Type>
    </Category>
  </Categories>
  <DatePosted>2021-01-17T08:45:10Z</DatePosted>
  <BusinessDate>2021-01-17</BusinessDate>
  <Status>Sale</Status>
  <Amount>12.00</Amount>
  <Modifiers>
    <Modifier>
      <ID>998000123</ID>
      <Name>Add Bacon</Name>
      <Categories>
        <Category>
          <Name>Add-On</Name>
          <ID>998</ID>
          <Type>Family Group</Type>
        </Category>
      </Categories>
    </Modifier>
  </Modifiers>
</SaleItem>
```



```
<Category>
  <Name>Food</Name>
  <ID>1</ID>
  <Type>Major Group</Type>
</Category>
</Categories>
<DatePosted>2021-01-17T08:37:20Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<Status>Sale</Status>
<Amount>1.50</Amount>
<IncludedInd>>false</IncludedInd>
<Quantity>1</Quantity>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<ProductDescription>Bacon Topping</ProductDescription>
<ReferenceIDs>
  <ReferenceID>
    <ID>MIBacon</ID>
    <Type>Procurement</Type>
    <SystemName>MyInventory</SystemName>
  </ReferenceID>
</ReferenceIDs>
<LineItemID>7</LineItemID>
<VendorProductCode>125BA</VendorProductCode>
<Cost>.15</Cost>
<Comments>
  <Comment>
    <TimeStamp>2021-01-17T08:37:20Z</TimeStamp>
    <Text>Cook Bacon crispy</Text>
    <Type>Comment</Type>
  </Comment>
</Comments>
</Modifier>
</Modifiers>
<Quantity>1</Quantity>
<TaxExemptInd>>false</TaxExemptInd>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<ProductDescription>Cheese Burger with letters, tomato and Cheddar
Cheese</ProductDescription>
<ReferenceIDs>
```



```
<ReferenceID>
  <ID>MIBurger63</ID>
  <Type>Procurement</Type>
  <SystemName>MyInventory</SystemName>
</ReferenceID>
</ReferenceIDs>
<SeatNumber>2</SeatNumber>
<LineItemID>6</LineItemID>
<Cost>1.35</Cost>
</SaleItem>
<SaleItem>
  <ID>16600012</ID>
  <Name>Kids Penne Pasta</Name>
  <Categories>
    <Category>
      <Name>Kids Main</Name>
      <ID>166</ID>
      <Type>Family Group</Type>
    </Category>
    <Category>
      <Name>Food</Name>
      <ID>1</ID>
      <Type>Major Group</Type>
    </Category>
  </Categories>
  <DatePosted>2021-01-17T08:45:10Z</DatePosted>
  <BusinessDate>2021-01-17</BusinessDate>
  <Status>Sale</Status>
  <Amount>8.00</Amount>
  <Quantity>1</Quantity>
  <TaxExemptInd>>false</TaxExemptInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <ProductDescription>Kids Penne Pasta with Tomato Sauce</ProductDescription>
  <ReferenceIDs>
    <ReferenceID>
      <ID>FOKIDS84</ID>
      <Type>Procurement</Type>
      <SystemName>MyInventory</SystemName>
    </ReferenceID>
  </ReferenceIDs>
  <SeatNumber>3</SeatNumber>
  <LineItemID>8</LineItemID>
  <Cost>.90</Cost>
</SaleItem>
```



```
<SaleItem>
  <ID>40800017</ID>
  <Name>1L Btl. Water</Name>
  <Categories>
    <Category>
      <Name>Water</Name>
      <ID>408</ID>
      <Type>Family Group</Type>
    </Category>
    <Category>
      <Name>Alc. Free Beverage</Name>
      <ID>4</ID>
      <Type>Major Group</Type>
    </Category>
  </Categories>
  <DatePosted>2021-01-17T08:45:10Z</DatePosted>
  <BusinessDate>2021-01-17</BusinessDate>
  <Status>Sale</Status>
  <Amount>6.50</Amount>
  <Quantity>1</Quantity>
  <TaxExemptInd>false</TaxExemptInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <ProductDescription>1L Bottled Water</ProductDescription>
  <ReferenceIDs>
    <ReferenceID>
      <ID>BEVALCFREE178</ID>
      <Type>Procurement</Type>
      <SystemName>MyInventory</SystemName>
    </ReferenceID>
  </ReferenceIDs>
  <SeatNumber>2</SeatNumber>
  <LineItemID>9</LineItemID>
  <VendorProductCode>IBWA1936</VendorProductCode>
  <Cost>.64</Cost>
</SaleItem>
<SaleItem>
  <ID>40800017</ID>
  <Name>1L Btl. Water</Name>
  <Categories>
    <Category>
      <Name>Water</Name>
      <ID>408</ID>
      <Type>Family Group</Type>
    </Category>
```



```
<Category>
  <Name>Alc. Free Beverage</Name>
  <ID>4</ID>
  <Type>Major Group</Type>
</Category>
</Categories>
<DatePosted>2021-01-17T08:46:18Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<Status>Void</Status>
<StatusComment>Wrong Order</StatusComment>
<Amount>6.50</Amount>
<Quantity>1</Quantity>
<TaxExemptInd>>false</TaxExemptInd>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
  <Employee>
    <EmployeeID>9026800012</EmployeeID>
    <Role>Approver</Role>
  </Employee>
</Employees>
<ProductDescription>1L Bottled Water</ProductDescription>
<ReferenceIDs>
  <ReferenceID>
    <ID>BEVALCFREE178</ID>
    <Type>Procurement</Type>
    <SystemName>MyInventory</SystemName>
  </ReferenceID>
  <ReferenceID>
    <ID>9</ID>
    <Type>LinItem</Type>
    <SystemName>Symphony2</SystemName>
  </ReferenceID>
</ReferenceIDs>
<SeatNumber>2</SeatNumber>
<LinItemID>10</LinItemID>
<VendorProductCode>IBWA1936</VendorProductCode>
<Cost>.64</Cost>
</SaleItem>
<SaleItem>
  <ID>14000003</ID>
  <Name>Cheese Selection</Name>
  <Categories>
    <Category>
      <Name>Dairy</Name>
      <ID>140</ID>
      <Type>Family Group</Type>
    </Category>
  </Categories>
</SaleItem>
```




```
</Category>
<Category>
  <Name>Food</Name>
  <ID>1</ID>
  <Type>Major Group</Type>
</Category>
</Categories>
<DatePosted>2021-01-17T09:10:51Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<Status>Sale</Status>
<Amount>4.80</Amount>
<Quantity>1</Quantity>
<TaxExemptInd>>false</TaxExemptInd>
<Measurement>
  <UnitOfMeasure>24</UnitOfMeasure>
  <Units>120</Units>
</Measurement>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<ProductDescription>Cheese Selection used on Consumption</ProductDescription>
<ReferenceIDs>
  <ReferenceID>
    <ID>FDARY23</ID>
    <Type>Procurement</Type>
    <SystemName>MyInventory</SystemName>
  </ReferenceID>
</ReferenceIDs>
<SeatNumber>1</SeatNumber>
<LineItemID>11</LineItemID>
<Cost>.25</Cost>
</SaleItem>
</SaleItems>
<PriceModifiers>
  <PriceModifier>
    <ID>3191</ID>
    <Name>10% Frequent guest</Name>
    <Code>Discount</Code>
    <DatePosted>2021-01-17T09:30:47Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Status>Sale</Status>
    <StatusComment>Frequent guest gold card 0123456789</StatusComment>
    <Amount>4.76</Amount>
    <IncludedInd>>false</IncludedInd>
    <Employees>
      <Employee>
```



```
        <EmployeeID>9026800012</EmployeeID>
        <Role>Approver</Role>
    </Employee>
</Employees>
</PriceModifier>
</PriceModifiers>
<TaxItems>
    <TaxItem>
        <ID>101</ID>
        <Name>19% Sales Tax</Name>
        <DatePosted>2021-01-17T09:30:47Z</DatePosted>
        <Amount>11.17</Amount>
        <IncludedInd>true</IncludedInd>
        <Employees>
            <Employee>
                <EmployeeID>9026800017</EmployeeID>
                <Role>Originator</Role>
            </Employee>
        </Employees>
        <Type>Tax</Type>
    </TaxItem>
</TaxItems>
<Total>
    <AmountBeforeTax>47.63 </AmountBeforeTax>
    <AmountAfterTax>54.04</AmountAfterTax>
</Total>
<TenderItems>
    <TenderItem>
        <ID>1000</ID>
        <Name>Cash</Name>
        <TypeCategory>Cash</TypeCategory>
        <DatePosted>2021-01-17T09:30:47Z</DatePosted>
        <BusinessDate>2021-01-17</BusinessDate>
        <Amount>65.00</Amount>
        <ChargeTip>10.96</ChargeTip>
        <Employees>
            <Employee>
                <EmployeeID>9026800017</EmployeeID>
                <Role>Originator</Role>
            </Employee>
        </Employees>
    </TenderItem>
</TenderItems>
</HTNG_PointOfSaleCheckNotifRQ>
```



4.4.4 Global Sample Message: XML

The following is a sample Point of Sale message for a particular scenario as described below.

4.4.4.1 Scenario

A guest ordered a room service breakfast overnight using a breakfast door hanger. The staff picked up the hanger overnight and entered the order into the POS system.

4.4.4.2 Specifics covered in the example message:

Definition	Location	Comments
Business Date from a previous date	BusinessDate	The check was opened by the night shift prior to the "End Of Day" in the POS system. The employee did open the check at night to be delivered in the next morning. The employee did not use a preorder function.
Age Demographics without a definition of what the age demographic represents	CustomerCount	The POS system did not provide detail as to what the age demographic is.
Multiple Employees	EmployeeInfos/EmployeeInfo Employees/Employee	The check is started at night by the night shift employee and is served by the morning shift employee.
Delivery Fee	SaleItems/SaleItem 2	The Delivery Fee is commonly configured as a SaleItem and is not applicable for a Service Charge.
Service Charge Fee	FeeItems/FeeItem	The check has a 20% Service Charge Fee.
Add-On VAT	TaxItems/TaxItem	The VAT is add-on to the sale items.
RoomCharge Reservation details	TenderItems/TenderItems/ ReferenceIDs/ReferenceID	The Reservation detail is in the References.

4.4.4.3 Financial Overview

SaleItems	Fee	Net	Add-On Tax 16%	Gross	Gross Rounded	Tip	Tender
39.00	6.80	45.80	7.33	53.13	53.13	1.87	55.00



4.4.4.1 Sample XML message

The following is a sample Point of Sale message in XML format:

```
<HTNG_PointOfSaleCheckNotifRQ xsi:schemaLocation="http://htng.org/2021A
HTNG_PointOfSaleCheckNotifRQ.xsd" xmlns="http://htng.org/2021A"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <MetadataInformation>
    <TimeStamp>2021-01-17T09:30:47Z</TimeStamp>
    <Language>en-us</Language>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <TransactionStatus>Closed</TransactionStatus>
    <Location>
      <ID>BER0164F</ID>
      <Name>Sheraton Marquis Hotel</Name>
      <ChainCode>0127US</ChainCode>
      <BrandCode>SHER1MAR</BrandCode>
    </Location>
  </MetadataInformation>
  <TransactionID>BER0164F2021011709304745012</TransactionID>
  <SourceSystem>Simphony</SourceSystem>
  <Outlet>
    <ID>160</ID>
    <Name>Room Service</Name>
    <TerminalID>BER0164RS01</TerminalID>
    <TerminalDescription>Room Service 01</TerminalDescription>
    <TableNumber>3016</TableNumber>
  </Outlet>
  <DateOpened>2021-01-17T02:55:20Z</DateOpened>
  <DateClosed>2021-01-17T09:30:47Z</DateClosed>
  <DatePosted>2021-01-17T09:30:47Z</DatePosted>
  <BusinessDate>2021-01-16</BusinessDate>
  <OrderType>Dine-In</OrderType>
  <CheckNumber>45012</CheckNumber>
  <CheckStatus>Sale</CheckStatus>
  <CustomerCount>
    <Total>2</Total>
  </CustomerCount>
  <EmployeeInfos>
    <EmployeeInfo>
      <EmployeeID>9026800023</EmployeeID>
      <GivenName>Mark</GivenName>
      <Surname>Twain</Surname>
      <ClockInfos>
        <ClockInfo>
          <ClockInTime>2021-01-16T22:55:47Z</ClockInTime>
          <ClockOutTime>2021-01-17T07:03:44Z</ClockOutTime>
```



```
        <Shift>Night</Shift>
      </ClockInfo>
    </ClockInfos>
  </EmployeeInfo>
<EmployeeInfo>
  <EmployeeID>9026800017</EmployeeID>
  <GivenName>Matthias</GivenName>
  <Surname>Heyde</Surname>
  <ClockInfos>
    <ClockInfo>
      <ClockInTime>2021-01-17T06:49:47Z</ClockInTime>
      <ClockOutTime>2021-01-17T12:09:44Z</ClockOutTime>
      <Shift>Early</Shift>
    </ClockInfo>
  </ClockInfos>
</EmployeeInfo>
</EmployeeInfos>
<Employees>
  <Employee>
    <EmployeeID>9026800023</EmployeeID>
    <Role>Originator</Role>
  </Employee>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<SaleItems>
  <SaleItem>
    <ID>12000122</ID>
    <Name>English Breakfast</Name>
    <Categories>
      <Category>
        <Name>Hot Breakfast</Name>
        <ID>120</ID>
        <Type>Family Group</Type>
      </Category>
      <Category>
        <Name>Food</Name>
        <ID>1</ID>
        <Type>Major Group</Type>
      </Category>
    </Categories>
    <DatePosted>2021-01-17T02:55:20Z</DatePosted>
    <BusinessDate>2021-01-16</BusinessDate>
    <Status>Sale</Status>
    <StatusComment>String</StatusComment>
    <Amount>34.00</Amount>
    <Quantity>2</Quantity>
  </SaleItem>
</SaleItems>
```



```
<TaxExemptInd>>false</TaxExemptInd>
<Employees>
  <Employee>
    <EmployeeID>9026800023</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<ProductDescription>English Breakfast with egg, bacon, sausage, toast and hot
beverage</ProductDescription>
<LineItemID>1</LineItemID>
<Cost>7.00</Cost>
</SaleItem>
<SaleItem>
  <ID>70000001</ID>
  <Name>Delivery Fee</Name>
  <Categories>
    <Category>
      <Name>F&B Other</Name>
      <ID>700</ID>
      <Type>Family Group</Type>
    </Category>
    <Category>
      <Name>F&B Other</Name>
      <ID>7</ID>
      <Type>Major Group</Type>
    </Category>
  </Categories>
  <DatePosted>2021-01-17T02:55:20Z</DatePosted>
  <BusinessDate>2021-01-16</BusinessDate>
  <Status>Sale</Status>
  <StatusComment>String</StatusComment>
  <Amount>5.00</Amount>
  <Quantity>1</Quantity>
  <TaxExemptInd>>false</TaxExemptInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800023</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <ProductDescription>Delivery fee</ProductDescription>
  <LineItemID>2</LineItemID>
  <Cost>0.00</Cost>
</SaleItem>
</SaleItems>
<FeeItems>
  <FeeItem>
    <ID>110</ID>
    <Name>20% Service Charge</Name>
```



```
<DatePosted>2021-01-17T02:55:20Z</DatePosted>
<Amount>6.80</Amount>
<IncludedInd>>false</IncludedInd>
<Employees>
  <Employee>
    <EmployeeID>9026800023</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<Type>Service charge</Type>
<BasisItems>
  <BasisItem>
    <Type>LineItem</Type>
    <ID>1</ID>
  </BasisItem>
</BasisItems>
<Status>Sale</Status>
<BusinessDate>2021-01-16</BusinessDate>
</FeelItem>
</FeelItems>
<TaxItems>
  <TaxItem>
    <ID>1001</ID>
    <Name>16% State Tax</Name>
    <DatePosted>2021-01-17T02:55:20Z</DatePosted>
    <Amount>7.33</Amount>
    <IncludedInd>>false</IncludedInd>
    <Employees>
      <Employee>
        <EmployeeID>9026800023</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <Type>Add-On Sales Tax</Type>
  </TaxItem>
</TaxItems>
<Total>
  <AmountBeforeTax>45.80</AmountBeforeTax>
  <AmountAfterTax>53.13</AmountAfterTax>
</Total>
<TenderItems>
  <TenderItem>
    <ID>4000</ID>
    <Name>Room Charge</Name>
    <TypeCategory>Room Charge</TypeCategory>
    <DatePosted>2021-01-17T09:30:47Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Amount>55.00</Amount>
    <TypeIdentifier>3016</TypeIdentifier>
```



```

    <ChargeTip>1.87</ChargeTip>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
    <ReferencelDs>
      <ReferencelD>
        <ID>1139843832239</ID>
        <Type>AccountID</Type>
        <SystemName>Opera</SystemName>
      </ReferencelD>
    </ReferencelDs>
  </TenderItem>
</TenderItems>
</HTNG_PointOfSaleCheckNotifRQ>

```

4.4.5 Global Sample Message: XML

The following is a sample Point of Sale message for a particular scenario as described below.

4.4.5.1 Scenario

The guest contacts the hotel shop and requests that items are to be shipped to his home address.

4.4.5.2 Specifics covered in the example message:

Definition	Path	Comments
Multiple Customer Details	Customers/Customer	The customer has a delivery and billing address.
Loyalty Program	LoyaltyPrograms/LoyaltyProgram	The customer is part of the property's loyalty program and is eligible to earn points on this transaction. Note: the value of the gained loyalty points is not part of the transaction.
No Customer Count		The customer count is not typical in a shop scenario.
Delivery Fee	SaleItems/SaleItem/LinItem 2	The delivery fee is a flat fee configured as a SaleItem.
Tax Inclusive	TaxItems/TaxItem	The tax is inclusive of the sale price of the sale items.
Credit card not present	TenderItems/TenderItem	The credit card is not present, since the customer is not on site.



4.4.5.3 Financial Overview

Net	16% Add-On Tax	Gross
133.00	21.28	154.28

4.4.5.1 Sample XML message

```
<HTNG_PointOfSaleCheckNotifRQ xsi:schemaLocation="http://htng.org/2021A
HTNG_PointOfSaleCheckNotifRQ.xsd" xmlns="http://htng.org/2021A"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <MetadataInformation>
    <TimeStamp>2021-01-17T09:30:47Z</TimeStamp>
    <Language>en-us</Language>
    <Currency>
      <CurrencyCode>USD</CurrencyCode>
      <DecimalPlaces>2</DecimalPlaces>
    </Currency>
    <TransactionStatus>Closed</TransactionStatus>
    <Location>
      <ID>BER0164F</ID>
      <Name>Sheraton Marquis Hotel</Name>
      <ChainCode>0127US</ChainCode>
      <BrandCode>SHER1MAR</BrandCode>
    </Location>
  </MetadataInformation>
  <TransactionID>BER0164F2021011709304745014</TransactionID>
  <SourceSystem>Symphony</SourceSystem>
  <Outlet>
    <ID>14</ID>
    <Name>Sundries Store</Name>
    <TerminalID>BER0164S01</TerminalID>
    <TerminalDescription>Store01</TerminalDescription>
  </Outlet>
  <Customers>
    <Customer>
      <CustomerName>
        <GivenName>John</GivenName>
        <Surname>Doe</Surname>
        <Name>John Doe</Name>
        <DeletedInd>false</DeletedInd>
      </CustomerName>
      <CompanyName>MyCompany</CompanyName>
    </Customer>
  </Customers>
</HTNG_PointOfSaleCheckNotifRQ>
```



```
<Address>
  <FormattedInd>true</FormattedInd>
  <Type>Business</Type>
  <UseType>Billing</UseType>
  <AddressLines>
    <AddressLine>Main Street 123</AddressLine>
  </AddressLines>
  <CityName>Hometown</CityName>
  <PostalCode>12345</PostalCode>
  <StateProv>MS</StateProv>
  <CountryCode>US</CountryCode>
</Address>
<Telephones>
  <PhoneNumber>(123) 456-7890</PhoneNumber>
  <Type>Mobile</Type>
</Telephones>
</Customer>
<Customer>
  <CustomerName>
    <GivenName>Jane</GivenName>
    <Surname>Doe</Surname>
    <Name>Jane Doe</Name>
    <DeletedInd>>false</DeletedInd>
  </CustomerName>
  <Address>
    <FormattedInd>true</FormattedInd>
    <Type>Home</Type>
    <UseType>Delivery</UseType>
    <AddressLines>
      <AddressLine>2nd Street 1740</AddressLine>
    </AddressLines>
    <CityName>Mytown</CityName>
    <PostalCode>UB7 7ND</PostalCode>
    <County>Middlesex</County>
    <StateProv>England</StateProv>
    <CountryCode>UK</CountryCode>
  </Address>
  <Telephones>
    <PhoneNumber>+44 124 456 7890</PhoneNumber>
    <Type>Mobile</Type>
  </Telephones>
</Customer>
</Customers>
<LoyaltyPrograms>
  <Loyalty>
    <ID>12abc456789</ID>
    <ProgramID>StarwoodPreferredGuest</ProgramID>
    <Level>Gold</Level>
    <MemberName>John Doe</MemberName>
  </Loyalty>
</LoyaltyPrograms>
```



```
</Loyalty>
</LoyaltyPrograms>
<DateOpened>2021-01-17T10:20:20Z</DateOpened>
<DateClosed>2021-01-17T10:20:20Z</DateClosed>
<DatePosted>2021-01-17T10:20:20Z</DatePosted>
<BusinessDate>2021-01-17</BusinessDate>
<OrderType>Delivery</OrderType>
<CheckNumber>45014</CheckNumber>
<CheckStatus>Sale</CheckStatus>
<EmployeeInfos>
  <EmployeeInfo>
    <EmployeeID>9026800017</EmployeeID>
    <GivenName>Matthias</GivenName>
    <Surname>Heyde</Surname>
    <ClockInfos>
      <ClockInfo>
        <ClockInTime>2021-01-17T09:56:47Z</ClockInTime>
        <ClockOutTime>2021-01-17T16:09:44Z</ClockOutTime>
        <Shift>All-Day</Shift>
      </ClockInfo>
    </ClockInfos>
  </EmployeeInfo>
</EmployeeInfos>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<SaleItems>
  <SaleItem>
    <ID>81701209</ID>
    <Name>Sheraton Towel L.</Name>
    <Categories>
      <Category>
        <Name>Merchandise</Name>
        <ID>817</ID>
        <Type>Family Group</Type>
      </Category>
      <Category>
        <Name>Shop</Name>
        <ID>18</ID>
        <Type>Major Group</Type>
      </Category>
    </Categories>
    <DatePosted>2021-01-17T10:20:20Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Status>Sale</Status>
    <StatusComment/>
  </SaleItem>
</SaleItems>
```



```
<Amount>118.00</Amount>
<Quantity>2</Quantity>
<TaxExemptInd>>false</TaxExemptInd>
<Employees>
  <Employee>
    <EmployeeID>9026800017</EmployeeID>
    <Role>Originator</Role>
  </Employee>
</Employees>
<ProductDescription>Sheraton Towel with Logo Large</ProductDescription>
<SeatNumber>String</SeatNumber>
<LinItemID>1</LinItemID>
<VendorProductCode>01TW189</VendorProductCode>
<Cost>2.40</Cost>
</SaleItem>
<SaleItem>
  <ID>82000007</ID>
  <Name>Delivery Fee Int.</Name>
  <Categories>
    <Category>
      <Name>Shop Other</Name>
      <ID>820</ID>
      <Type>Family Group</Type>
    </Category>
    <Category>
      <Name>Shop</Name>
      <ID>18</ID>
      <Type>Major Group</Type>
    </Category>
  </Categories>
  <DatePosted>2021-01-17T10:20:20Z</DatePosted>
  <BusinessDate>2021-01-17</BusinessDate>
  <Status>Sale</Status>
  <Amount>15.00</Amount>
  <Quantity>1</Quantity>
  <TaxExemptInd>>false</TaxExemptInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <ProductDescription>International Shipping Fee</ProductDescription>
  <SeatNumber>String</SeatNumber>
  <LinItemID>2</LinItemID>
  <Cost>0.00</Cost>
</SaleItem>
</SaleItems>
<TaxItems>
```



```
<TaxItem>
  <ID>1001</ID>
  <Name>16% State Tax</Name>
  <DatePosted>2021-01-17T10:20:20Z</DatePosted>
  <Amount>21.28</Amount>
  <IncludedInd>>false</IncludedInd>
  <Employees>
    <Employee>
      <EmployeeID>9026800017</EmployeeID>
      <Role>Originator</Role>
    </Employee>
  </Employees>
  <Type>Add-On Sales Tax</Type>
</TaxItem>
</TaxItems>
<Total>
  <AmountBeforeTax>133.00</AmountBeforeTax>
  <AmountAfterTax>154.28</AmountAfterTax>
</Total>
<TenderItems>
  <TenderItem>
    <ID>8012</ID>
    <Name>Visa</Name>
    <TypeCategory>Visa Card</TypeCategory>
    <DatePosted>2021-01-17T10:20:20Z</DatePosted>
    <BusinessDate>2021-01-17</BusinessDate>
    <Amount>154.28</Amount>
    <LastFour>6789</LastFour>
    <CardPresentInd>>false</CardPresentInd>
    <AuthorizationCode>98702B</AuthorizationCode>
    <ManualRetrievalInd>>false</ManualRetrievalInd>
    <PaymentStatus>Authorized</PaymentStatus>
    <ChargeTip>1.87</ChargeTip>
    <Employees>
      <Employee>
        <EmployeeID>9026800017</EmployeeID>
        <Role>Originator</Role>
      </Employee>
    </Employees>
  </TenderItem>
</TenderItems>
<Deliveries>
  <Delivery>
    <Amount>0.00</Amount>
    <ShippingDate>2021-01-17T15:27:12Z</ShippingDate>
    <Fulfillment>ShipToCustomer</Fulfillment>
    <Customer>
      <CustomerName>
        <GivenName>Jane</GivenName>
      </CustomerName>
    </Customer>
  </Delivery>
</Deliveries>
```



```

    <Surname>Doe</Surname>
    <Name>Jane Doe</Name>
    <DeletedInd>>false</DeletedInd>
  </CustomerName>
  <Address>
    <FormattedInd>>true</FormattedInd>
    <Type>Home</Type>
    <UseType>Delivery</UseType>
    <AddressLines>
      <AddressLine>2nd Street 1740</AddressLine>
    </AddressLines>
    <CityName>Mytown</CityName>
    <PostalCode>UB7 7ND</PostalCode>
    <County>Middlesex</County>
    <StateProv>England</StateProv>
    <CountryCode>UK</CountryCode>
  </Address>
  <Telephones>
    <PhoneNumber>+44 124 456 7890</PhoneNumber>
    <Type>Mobile</Type>
  </Telephones>
</Customer>
</Delivery>
</Deliveries>
</HTNG_PointOfSaleCheckNotifRQ>

```

4.5 Guest Request – On property

A collection of individual guest request transactions at any stage of their lifecycle.

Data Element Table – Notification

Element @Attribute	Card in-ality	XML Only	Data Type	Description/Contents
Request	1		Object	Detailed information regarding a guest request.
../RequestID	1		String	A unique identifier for the request (i.e. ticket ID, or ticket number).
../RequestGUID	0..1		GUID	A globally unique identifier for the request. The GUID is optional and may be created by the sender or the receiver depending on their agreement. The sending system has an identifier that is unique to their system, but the receiving system may be aggregating data for multiple systems in which case the sender's

				RequestID may not be unique among all of the records in the receiving system. Aggregating systems are responsible for managing their data integrity.
../fulfilledAsRequestedInd	0..1		Indicator	When true, the request details were fulfilled as requested, when false the request was not fulfilled as requested and the Comment field may provide further detail.
../requestedByGuestInd	0..1		Indicator	When true, the guest made the request.
../CreateTimeStamp	1		dateTime	The date and time that the request was entered (ISO 8601).
../LastUpdateTimeStamp	0..1		dateTime	The date and time that the request was modified (ISO 8601).
../Checksum	0..1		string	Used to validate whether or not a record has changed. There are several algorithms that are used for generating a checksum, the method used can be negotiated for the specific implementation. Some methods include CRC, MD5, SHA-1, CRC-32, CRC-64, SHA_256.
../ChecksumType	0..1		string	Specifies the algorithm used to generate the CheckSum (e.g. CRC, MD5, SHA-1, SHA-256, SHA-512).
../MessageSourceSystem	1		string	The system from which the request was sent.
../PropertyID	0..1		string	An identifier for the property.
../CreatorID	1		string	An identifier for the person or system that entered the request.
../ExternalReference	0..n		ExternalReference	Allows for external system IDs to be sent.
../ExternalReference/systemType	1		string	Specifies the type of system.
../ExternalReference/iD	1		string	ID in the referenced system.
../ExternalReference/systemName	1		string	The name or ID of the referenced system.
../ParentID	0..1		string	If this request spawned off of another request, this ID is the ID of the initial

				request. If no ID is present, this may be a parent record, or it may be a record that is not associated to any other records. If this is a parent record, it's RecordID will be present in the ParentID field of the associated records.
../RequestorType	1		RequestorType_Enum	Specifies how the request was initiated. Available options: <ul style="list-style-type: none"> • Guest • Staff • System
../RequestorID	0..1		string	An identifier for the initiator of the request (e.g. staff ID).
../RequestorCategory	0..1		string	Specifies the nature of the request (e.g. housekeeping service, delivery service, repair, etc.) This is likely an enumeration at a property level.
../RequestStatus	0..n		RequestStatus	An array of status objects that identify changes to the status over time. The most recent update is the current status.
../RequestStatus/Status	1		RequestStatus_Enum	Specifies the state of the request (e.g. New, In progress, Completed, etc.). Available options: <ul style="list-style-type: none"> • Completed • Canceled • Closed • New • In progress • Paused
../RequestStatus/UserID	1		string	An identifier for the person or system that input the status.
../RequestStatus/TimeStamp	1		dateTime	The date and time that the status was added.
../EarliestStart	1		dateTime	Execution of the request begins after this time. If earliest start time is not requested this field will be populated with the timestamp from the ticket creation.(ISO 8601).
../DueBy	1		dateTime	The request should be resolved by this time. If DueBy is not available this

				field will be populated with the timestamp from the ticket creation(ISO 8601).
../ActualStart	0..1		dateTime	The date and time that ticket was acted upon (ISO 8601).
../ActualEnd	0..1		dateTime	The date and time that ticket was completed (ISO 8601).
../ItemRequested	1		string	The item or action to be completed.
../Quantity	0..1		decimal	Number of items requested.
../Cost	0..n		Cost	An array of expenses associated with performing this request.
../Cost/billableInd	0..1		Indicator	When true, this cost is billable to the guest.
../Cost/Amount	1		decimal	A monetary amount.
../Cost/Currency	0..1		CurrencyType	Specifies the currency code and decimal places for the amount.
../Currency/currencyCode	0..1		string	An ISO 4217 (3) alpha character code that specifies a monetary unit.
../Currency/	0..1		integer	The ISO 4217 standard "minor unit" for the number of decimal places for a particular currency.
../Cost/CostType	0..1		Cost_Enum	A category for the cost such as labor, parts, etc. Available options: <ul style="list-style-type: none"> • Contract labor • Equipment • Labor • Parts • Service • Amenity • Merchandise
../Cost/Item	0..1		string	Describes the item for which the cost is associated.
../Cost/Quantity	0..1		integer	The number of this item for which the cost is associated.
../Requestee	0..1		string	A person or entity that the guest requested to perform the action or delivery or item.

../Assignee	1		Asignee	Details regarding the person and/or department responsible for fulfilling the request.
../Assignee/ID	1		string	The ID person or entity assigned to handle this request. This is related to the AssigneeType field.
../Assignee/AssigneeType	1		AssigneeType_Enum	Specifies the entity type assigned to handle the request (Department, StaffMember, External). Available options: <ul style="list-style-type: none"> • Department • Staff member • Job function • External
../Assignee/Department	0..1		string	The name of the department or facility to which this assignment belongs.
../Assignee/ExternalReference	0..1		ExternalReference	Specifies the ID of an external system to which this ticket was assigned.
../ExternalReference/systemType	1		string	Specifies the type of system.
../ExternalReference/iD	1		string	ID in the referenced system.
../ExternalReference/systemName	1		string	The name or ID of the referenced system.
../PriorityLevel	0..1		string	A ranking used to identify the level of importance for handling the request.
../AreaID	0..1		string	An identifier for a location within a hotel, this may be an area or a sub area.
../AreaName	1		string	A description of the location where the request is to take place (e.g. Room 305, Room 305 Bathroom).
../RequestDescription	0..1		string	Free form text explaining the request. May originate in an external system and may then be translated to more detailed information in the guest request details object. If a guest request system is not being utilized this may contain the full content of the guest request.

../Comment	0..1		Comment	Notes specifically related to this request.
../Comment/Text	1		string	Textual information.
../Comment/DateTimeStamp	1		dateTime	The date and time the comment was entered (ISO 8601).
../Comment/CommenterID	1		string	An identifier for the person or system that created the comment.
../ResolutionAction	0..1		ActionType_Enum	Specifies how the request was resolved (e.g. Repair, Replace, Delivered, Recovery). Available options: <ul style="list-style-type: none"> • Delivered • Recovery • Repair • Replace
../Guest	0..1		Guest	Identification of the guest who made the request.
../Guest/GuestID	1..n		ExternalID	An identifier for the guest.
../ExternalReference/systemType	1		string	Specifies the type of system.
../ExternalReference/iD	1		string	ID in the referenced system.
../ExternalReference/systemName	1		string	The name or ID of the referenced system.
../Guest/ReservationID	0..n		ExternalID	A confirmation number for the reservation for this guest.
../ExternalReference/systemType	1		string	Specifies the type of system.
../ExternalReference/iD	1		string	ID in the referenced system.
../ExternalReference/systemName	1		string	The name or ID of the referenced system.

4.5.1 Global Sample Message: XML

The following is a sample Guest Request message in XML format. This message is not an example of a particular use case, but simply shows an example of the data format for each field.



```
<?xml version="1.0" encoding="UTF-8"?>
<htng-0100:Request
  xmlns:htng-0100="http://www.modeldev.ahla.com/models/v1"
  fulfilledAsRequestedInd="true" requestedByGuestInd="true">
  <htng-0100:RequestID>2353658856</htng-0100:RequestID>
  <htng-0100:RequestGUID>7a5ede63-8032-4ef2-b6d1-55c14e637931</htng-0100:RequestGUID>
  <htng-0100:CreateTimeStamp>2011-01-24T09:45:00-06:00</htng-0100:CreateTimeStamp>
  <htng-0100:LastUpdateTimestamp>2011-07-04T14:15:00+06:00</htng-0100:LastUpdateTimestamp>
  <htng-
0100:Checksum>387C3F90B90C2A313FF2E64027555C4BC3A5A5F41ADE11A6D152992AFF2466E0<
/htng-0100:Checksum>
  <htng-0100:ChecksumType>SHA-256</htng-0100:ChecksumType>
  <htng-0100:MessageSourceSystem>RequestsRUs</htng-0100:MessageSourceSystem>
  <htng-0100:PropertyID>LAXAP</htng-0100:PropertyID>
  <htng-0100:CreatorID>9545887586</htng-0100:CreatorID>
  <htng-0100:ExternalReference iD="595ABES2522"
    systemName="TabletsRUs" systemType="In room tablet"/>
  <htng-0100:ExternalReference iD="595ABES2522"
    systemName="TabletsRUs" systemType="In room tablet"/>
  <htng-0100:ParentID>0025259875</htng-0100:ParentID>
  <htng-0100:RequestorType>Guest</htng-0100:RequestorType>
  <htng-0100:RequestorID>8988858412</htng-0100:RequestorID>
  <htng-0100:RequestCategory>Housekeeping</htng-0100:RequestCategory>
  <htng-0100:RequestStatus>
    <htng-0100:Status>Completed</htng-0100:Status>
    <htng-0100:UserID>8596542547</htng-0100:UserID>
    <htng-0100:TimeStamp>2011-12-05T06:00:00Z</htng-0100:TimeStamp>
  </htng-0100:RequestStatus>
  <htng-0100:RequestStatus>
    <htng-0100:Status>Canceled</htng-0100:Status>
    <htng-0100:UserID>8596542547</htng-0100:UserID>
    <htng-0100:TimeStamp>2011-01-24T09:45:00-06:00</htng-0100:TimeStamp>
  </htng-0100:RequestStatus>
  <htng-0100:EarliestStart>2022-03-19T12:45:37+00:00</htng-0100:EarliestStart>
  <htng-0100:DueBy>2022-03-19T19:22:16+00:00</htng-0100:DueBy>
  <htng-0100:ActualStart>2022-03-19T17:12:49+00:00</htng-0100:ActualStart>
  <htng-0100:ActualEnd>2022-03-19T17:28:37+00:00</htng-0100:ActualEnd>
  <htng-0100:ItemRequested>Rollaway bed</htng-0100:ItemRequested>
  <htng-0100:Quantity>1</htng-0100:Quantity>
  <htng-0100:Cost billableInd="true">
    <htng-0100:Amount>35.00</htng-0100:Amount>
    <htng-0100:Currency currencyCode="USD" decimalPlaces="2"/>
    <htng-0100:CostType>Contract labor</htng-0100:CostType>
    <htng-0100:Item>Rollaway bed</htng-0100:Item>
    <htng-0100:Quantity>1</htng-0100:Quantity>
  </htng-0100:Cost>
  <htng-0100:Cost billableInd="true">
    <htng-0100:Amount>35.00</htng-0100:Amount>
    <htng-0100:Currency currencyCode="USD" decimalPlaces="2"/>
```



```
<htng-0100:CostType>Equipment</htng-0100:CostType>
<htng-0100:Item>Rollaway bed</htng-0100:Item>
<htng-0100:Quantity>1</htng-0100:Quantity>
</htng-0100:Cost>
<htng-0100:Requestee>5655595325</htng-0100:Requestee>
<htng-0100:Assignee>
  <htng-0100:ID>5865541575</htng-0100:ID>
  <htng-0100:AssigneeType>Department</htng-0100:AssigneeType>
  <htng-0100:Department>Example String Value</htng-0100:Department>
  <htng-0100:ExternalReference iD="595ABES2522"
    systemName="TabletsRUs" systemType="In room tablet"/>
</htng-0100:Assignee>
<htng-0100:PriorityLevel>3</htng-0100:PriorityLevel>
<htng-0100:AreaID>3268651257</htng-0100:AreaID>
<htng-0100:AreaName>Room 205</htng-0100:AreaName>
<htng-0100:RequestDescription>Deliver Rollaway</htng-0100:RequestDescription>
<htng-0100:Comment>
  <htng-0100:Text>Example String Value</htng-0100:Text>
  <htng-0100:DateTimeStamp>2011-07-04T14:15:00+06:00</htng-0100:DateTimeStamp>
  <htng-0100:CommenterID>Example String Value</htng-0100:CommenterID>
</htng-0100:Comment>
<htng-0100:ResolutionAction>Delivered</htng-0100:ResolutionAction>
<htng-0100:Guest>
  <htng-0100:ReservationID iD="595ABES2522"
    systemName="TabletsRUs" systemType="In room tablet"/>
  <htng-0100:ReservationID iD="595ABES2522"
    systemName="TabletsRUs" systemType="In room tablet"/>
  <htng-0100:GuestID iD="595ABES2522" systemName="TabletsRUs" systemType="In room
tablet"/>
  <htng-0100:GuestID iD="595ABES2522" systemName="TabletsRUs" systemType="In room
tablet"/>
</htng-0100:Guest>
</htng-0100:Request>
```

4.5.2 Global Sample Message: JSON

The following is a sample Guest Request message in JSON format:

```
{
  "RequestSummary" : {
    "fulfilledAsRequestedInd" : true,
    "requestedByGuestInd" : true,
    "RequestID" : "2353658856",
    "RequestGUID" : "7a5ede63-8032-4ef2-b6d1-55c14e637931",
    "CreateTimeStamp" : "2011-01-24T09:45:00-06:00",
    "LastUpdateTimestamp" : "2011-07-04T14:15:00+06:00",
    "Checksum" : "387C3F90B90C2A313FF2E64027555C4BC3A5A5F41ADE11A6D152992AFF2466E0",
```



```
"ChecksumType" : "SHA-256",
"MessageSourceSystem" : "RequestsRUs",
"PropertyID" : "LAXAP",
"CreatorID" : "9545887586",
"ExternalReference" : [ {
  "value" : null,
  "systemType" : "In room tablet",
  "iD" : "595ABES2522",
  "systemName" : "TabletsRUs"
}, {
  "value" : null,
  "systemType" : "In room tablet",
  "iD" : "595ABES2522",
  "systemName" : "TabletsRUs"
} ],
"ParentID" : "0025259875",
"RequestorType" : {
  "value" : "Guest"
},
"RequestorID" : "8988858412",
"RequestCategory" : "Housekeeping",
"RequestStatus" : [ {
  "@type" : "RequestStatus",
  "Status" : {
    "value" : "Completed"
  },
  "UserID" : "8596542547",
  "TimeStamp" : "2011-12-05T06:00:00Z"
}, {
  "@type" : "RequestStatus",
  "Status" : {
    "value" : "Canceled"
  },
  "UserID" : "8596542547",
  "TimeStamp" : "2011-01-24T09:45:00-06:00"
} ],
"EarliestStart" : "2022-03-19T12:45:37+00:00",
"DueBy" : "2022-03-19T19:22:16+00:00",
"ActualStart" : "2022-03-19T17:12:49+00:00",
"ActualEnd" : "2022-03-19T17:28:37+00:00",
"ItemRequested" : "Rollaway bed",
"Quantity" : 1,
"Cost" : [ {
  "@type" : "Cost",
  "billableInd" : true,
  "Amount" : 35.00,
  "Currency" : {
    "value" : null,
    "currencyCode" : "USD",
```



```
"decimalPlaces" : 2
},
"CostType" : {
  "value" : "Contract labor"
},
"Item" : "Rollaway bed",
"Quantity" : 1
}, {
"@type" : "Cost",
"billableInd" : true,
"Amount" : 35.00,
"Currency" : {
  "value" : null,
  "currencyCode" : "USD",
  "decimalPlaces" : 2
},
"CostType" : {
  "value" : "Equipment"
},
"Item" : "Rollaway bed",
"Quantity" : 1
} ],
"Requestee" : "5655595325",
"Assignee" : {
"@type" : "Assignee",
"ID" : "5865541575",
"AssigneeType" : {
  "value" : "Department"
},
"Department" : "Example String Value",
"ExternalReference" : {
  "value" : null,
  "systemType" : "In room tablet",
  "iD" : "595ABES2522",
  "systemName" : "TabletsRUs"
}
},
"PriorityLevel" : 3,
"ArealD" : "3268651257",
"AreaName" : "Room 205",
"RequestDescription" : "Deliver Rollaway",
"Comment" : {
"@type" : "Comment",
"Text" : "Example String Value",
"DateTimeStamp" : "2011-07-04T14:15:00+06:00",
"CommenterID" : "Example String Value"
},
"ResolutionAction" : {
  "value" : "Delivered"
}
```



```
},  
"Guest" : {  
  "@type" : "Guest",  
  "ReservationID" : [ {  
    "value" : null,  
    "systemType" : "In room tablet",  
    "iD" : "595ABES2522",  
    "systemName" : "TabletsRUs"  
  }, {  
    "value" : null,  
    "systemType" : "In room tablet",  
    "iD" : "595ABES2522",  
    "systemName" : "TabletsRUs"  
  } ],  
  "GuestID" : [ {  
    "value" : null,  
    "systemType" : "In room tablet",  
    "iD" : "595ABES2522",  
    "systemName" : "TabletsRUs"  
  }, {  
    "value" : null,  
    "systemType" : "In room tablet",  
    "iD" : "595ABES2522",  
    "systemName" : "TabletsRUs"  
  } ]  
}  
}
```



5 IMPLEMENTATION NOTES

This section covers models for data extraction, data communication, and some notes to ensure consistent use of JSON when used for extraction.

5.1 EXTRACTING THE DATA

The purpose of the Business Analytic Transactional Extract is to create a standard set of structures that can be used to collect information from various hotel systems to use for analytics. This is an example of the Canonical Data Model pattern. In an ideal world, the core business systems, including the Property Management System (PMS), the Central Reservation System (CRS), the Point of Sales (POS), and Guest Request (GRS) systems, would provide a method to automatically extract the data in the target formats in a direct data extract that could be loaded into the analytics system.

In the meantime, the following paragraphs discuss practical means of collecting the transaction data. Some of the following strategies are based on well-known Patterns for Enterprise Integration.

5.1.1 Message Capture via Proxy (Wiretap Pattern)

This capture method places a proxy between a message source like a CRS and a message target like the PMS. The proxy captures messages as they arrive and then copies the message to the extract stream and also sends the message to the intended destination. The messages in the extract stream can be sent to a service endpoint, stored for later transformation and processing, or can be transformed and directly sent and loaded into an analytic system.

5.1.2 Event Notification – Publish and Subscribe

Some systems support a notification model allowing subscribers to receive a message each time an event occurs, such as an update to a reservation. This solution uses a message end-point to receive the notifications as they are generated. The notifications can be stored for later transformation and processing or can be transformed and directly sent and loaded into an analytics system.

5.1.3 Polling Consumer

Event Polling is similar to event notification, except the event source is polled to determine and collect any events since the previous request. Event messages may be grouped or sent individually.

5.1.4 Direct Read

The direct read strategy reads the data stored in the database. The data is extracted by reading or querying the storage file or database to find all new, modified, or deleted records since the last read. This typically requires that rows have either a generation column or a time and date stamp. This also requires an understanding of the data and table structures and may require multiple queries or joins to extract all required information. The extract can then be transformed and loaded into the analytics system.

5.1.5 Data or Transaction Log Read

It may not be possible to read directly from a live transaction-based system; however, many data storage systems generate transaction logs as data is modified in the database. These transaction records can



often be used to capture the changes to the underlying database. This method reads and extracts data from the transaction or other logs, which requires knowledge of the structure of the log files. The extracted data can then be sent, transformed, and loaded into the analytics system.

5.1.6 Report Scanning

Most systems can generate reports detailing the transactions that have occurred during a period of time - many systems even offer the opportunity to create custom reports. These reports can be scanned and parsed to extract the data from the reports to provide the data needed for the analytics system.

5.1.7 Communication Method

Once data has been extracted, this document does not specify how the data is transferred to other systems. There is no single right way to do this, and we suggest that the reader considers the facilities covered in the HTNG [Event Notification](#) and [Bulk Data API](#) Specifications. Both specifications support a subscription model allowing different systems to subscribe to the information they need. These systems can receive the information directly or be notified when information is available to read.

It is recommended to use standard web protocols to transfer the data. We suggest that the secure versions of these protocols should be used over the insecure versions. For events, notifications, or single messages, we suggest the HTTPS or SOAP over HTTP protocols. For large file or batch transfers, we suggest the SSH-related SFTP or SCP protocols or the Secure FTP protocol.

The current best practice is to use only the secure versions of the protocols, which are the ones we have listed. You are, of course, free to go in your own direction and use proprietary protocols, message queuing systems, or other means of communication, but we feel these add complexity and make integration more difficult.

5.1.8 JSON Format Specifics

Specific guidance for JSON implementations:

- Required fields CAN NOT be EMPTY or NULL
- Optional NUMERIC fields CAN be NULL but NOT EMPTY
- Optional fields DATE fields CAN be NULL but not EMPTY
- Optional STRING fields CAN be EMPTY but not NULL



6 Outlook

Due to the volume of messaging applicable to analytics, the Business Analytics Transactional Extract Workgroup decided to create these standards in phases, allowing the specifications to be implemented as they are completed and published.

The standard you are reading includes the first phase, which covers Financial Transactions, Reservations, and Group Blocks; the second phase, which covers Point of Sale (POS); and the third, which covers Guest Request messages. As of April 2022, a fourth phase is in the planning stage and may include Profile, Housekeeping, Staffing, or other options under consideration.

