BUSINESS ANALYTICS TRANSACTIONAL EXTRACT SPECIFICATION

For Financial Transactions,
Reservations, Blocks and Point of Sale

April 6, 2021

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.

TABLE OF CONTENTS

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. For the PMS companies, this also becomes a significant bottleneck, 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 and on-premise 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. The answer obviously 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 innovation. 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 on the verge of a significant revolution 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

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. The workgroup is currently identifying an area of focus for Phase III; this will likely cover either Guest Request or Profile, but other options are also under consideration.

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 to use analytics in a hospitality context. For revenue managers and senior management who make data-driven decisions, this document will help clarify what data points can be used in those analyses. For PMS, POS, CRS, CRM and other technology vendors that need to interface with analytics systems, conforming with the standards set forth in this document will allow for easier interfaces with analytics systems. For technology professionals who work on the analytics platforms themselves, this document will help them know 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.
- **Guest Requests:** In future versions, guest requests will be split out into its own message.

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 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 you 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 are 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 at 12 versus 14 years old, it 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 for a much easier integration between two entities that are otherwise both compliant with this specification.

- **Data Granularity:** This specification provides the most detailed 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, as he can see compared to last years' final numbers, he is way behind. He would like to see what the revenue pickup looked like at the same time last year to identify how the reservations developed over the rest of the month. In case last year's pickup was better at the same time, he will have to act quickly to insure his pickup increases to match or surpass last years' 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 for those guests and invite them back to stay. Here, 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 spend by market segment and guest type. This will allow them to see what the most interesting segment of guests is, 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 for specific regions to entice customers from those regions to visit the hotels. Marketing would now like to see the efficiency 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 insure maximum revenue for the hotel. He will want to compare blocks of pickup room nights by travel agents and companies from two years ago until now, at one month out from the trade show. Based on this he will decide which company or travel agency is most likely to stick to the agreement. He will then look at the the average spend of guests during the tradeshow by company and rate code to establish which organization brought most revenue (not only in-room revenue but also additional spend at the hotel). The outcome will then be used to ensure that the appropriate companies and travel agents are allowed to bring their guests during the tradeshow time.

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 of 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 she can decide on granting the required 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 renovating some rooms. Together, with the head of reception, they pull a report to compare the on-the-books occupancy against the same time last year and the final data. They also take the forecasted weather and the upcoming events into consideration before they decide whether the required rooms can be taken out of order.

This scenario requires data within the Reservation Message.

3.8 NEW LINE OF BUSINESS

A new spa in a resort has opened. Prior to opening, a business plan with a budget and forecast was previously put into place for the hotel. The manager would now, after two months of operation, like to verify 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 and his 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 costs incurred from spoilage. To do so, he wants to improve his prediction of what the spoilage may be. The following variables have been identified as key contributors to spoilage:

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

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, each of these variables is analyzed.

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 amount 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 divisional F&B Manager needs to see trends to negotiate bulk purchase agreements with a supplier. The manager knows that on average, co-branding a menu item historically increases 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, asmall 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 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, season 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 result of the analysis highlights certain item categories' purchasing trends, leading the manager to vary retail offerings and menus by season to capitalize on the trends identified.

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 or 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 theoretical cost of goods (how much *should have been consumed* based on sales analysis from the point of sale system) with 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 allow for targeted promotions to 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 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 and others.)*

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.)*

4 MESSAGES

The following messages 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: • 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: • 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	An enumerated listed used to specify the revenue group for which the transaction code applies Available values: • 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

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../ 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: • 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: • 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:

```xml
<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>
```

```xml
            <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:

```json
{

"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",
```

```
        "TransactionCodeRevenueType" : "FoodAndBeverage",
        "BusinessDate" : "2018-07-02",
        "CurrencyCodeDetails" : {
            "Code" : "EUR",
            "DecimalPlaces" : 2
        },
        "Amount" : 19.00,
        "Quantity" : 1,
        "IsAdjustment" : false,
        "AdjustmentReason" : null,
        "InvoiceNumber" : "487597565",

        "PaymentMethod" : "",
        "POSDetails" : {
            "Code" : "BAR",
            "TransactionID" : "9797065675",
            "CheckID" : "98686765",
            "Covers" : 1
        },
        "Taxes" : [{
                "Type" : "VAT",
                "Code" : "VAT 10%",
                "Amount" : 1.90,
                "IsIncluded" : true
            }
        ],
        "References" : [{
                "Type" : "ReservationID",
                "Id" : "4578995"
            }
        ]

    }
  ]
}
```

4.2 RESERVATIONS

A collection of reservation data.

Data Element Table - Request

Element | @Attribute	Cardinality	XML Only	Data Type	Description/Contents

HTNG_ReservationDataNotifRQ	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: • 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 identifer 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/IsPointOfSale	1		Boolean	When true, the external reference is the source of sale

../ ExternalReferences /ExternalReference/Type	0..1		String Enumeration	Define the type of the profile if the external reference is a profile linked to the reservation. Available value: • 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	An enumerated list identifying the status of this reservation Available values: • Reserved • Tentative • Optional

				• Cancelled	
				• No-show	
				• Waitlisted	
				• In-house	
				• CheckedOut	
../Reservation/CreatedDateTime	1		DateTime ISO 8601	The date and time the reservation was created; formatted using ISO 8601	
../Reservation/ModifiedDateTime	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/CancellationBusinessDate	0..1		Date	The business date of the cancellation (this is not time zone sensitive); formatted using ISO 8601.	
../Reservation/CancellationDateTime	0..1		DateTime	The actual calendar cancellation date and time; formatted using ISO 8601	
../Reservation/CancellationReason	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/DecimalPlaces	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: • 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	An enumerated list describing the status of the room. The available options are: • 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: • SingleBedroom • DoubleBedroom • KingBedroom • QueenBedroom • TwinBedroom • TripleBedroom • QuadrupleBedroom • FamilyRoom • JuniorSuite • Suite • LargeSuite • Parlour • Apartment • Penthouse • Studio • Condo • Loft • Bungalow • Villa • Cottage • Cabin • Lodge • Tent

				• 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: • 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: • 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: • 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		Sting	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: • 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 it 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: • 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: • 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: • 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/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:

```xml
<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>
```

```xml
                    <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>
                        <IsForcasted>true</IsForcasted>
                        <RoomNumber>15</RoomNumber>
                        <ExtraBeds>
                            <ExtraBed>
                            <Type>Rollaway</Type>
```

```xml
                    <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>
```

```xml
                    <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>
```

```xml
                    <Start>2018-07-01</Start>
                    <End>2018-07-01</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>
            <RatePlans>
                <RatePlan>
                    <Code>HOL</Code>
                    <Name>Holidays</Name>
                    <Description>Holidays offer 2018</Description>
                    <CategoryCode>OF18</CategoryCode>
                    <CategoryName>Offer 2018</CategoryName>
                </RatePlan>
            </RatePlans>
            <Segmentation>
                <Markets>
                    <Market>
                        <Start>2018-07-01</Start>
                        <End>2018-07-06</End>
                        <Code>INDLEI</Code>
                        <Name>Individual Leisure</Name>
                        <CategoryCode>IND</CategoryCode>
                        <CategoryName>Individual</CategoryName>
                    </Market>
                </Markets>
                <Sources>
                    <Source>
                        <Start>2018-07-01</Start>
                        <End>2018-07-06</End>
                        <Code>OTA</Code>
                        <Name>Online Travel Agent</Name>
                        <CategoryCode>TA</CategoryCode>
                        <CategoryName>Travel Agent</CategoryName>
                    </Source>
                </Sources>
                <Origins>
                    <Origin>
                        <Start>2018-07-01</Start>
                        <End>2018-07-06</End>
                        <Code>CRS</Code>
                        <Name>Central Reservation System</Name>
```

```xml
            <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>
```

```xml
            <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>
            <UnitPricing>
               <RevenueType>Other</RevenueType>
               <RevenueCode>DJ</RevenueCode>
               <Amount>10.00</Amount>
               <Taxes>
                  <Tax>
                     <Type>VAT</Type>
                     <Code>VAT 10%</Code>
                     <Amount>1.00</Amount>
```

```xml
                            <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:

```json
{
    "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",
```

```json
                "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",
```

htng

```
"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",
```

```json
                    "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,

                            "AgeQualifiyingCode" : "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
                        }
                    ]
                }
            ]
        }
    ],
    "Commisions" : [{
            "Start" : "2018-07-01",
            "End" : "2018-07-06",
            "RefID" : "12G",
            "CommissionableAmount" : {
                "Amount" : 960.00,
                "TaxInclusiveIndicator" : true,
                "Percent" : 12,
```

```
            "FlatCommissionAmount" : null ,

            "CommissionPayableAmount" : null
          }
        }
      ]

    }
  ]
 }
]
}
```

4.3 BLOCKS

A collection of block data from where reservations are picked up.

Data Element Table – Request

Element | @Attribute	Card in- ality	XML Only	Data Type	Description/Contents
HTNG_BlocksRQ	1			A collection of block data from where reservations are picked up
Blocks	1		Array	A collection of group blocks
Blocks/Block	1..n	X	Object	A single block in the collection of blocks
../Block/NotificationType	1		String Enumeration	An enumerated list used to specify the type of notification The available values are: • New • Updated • Deleted
../Block/PropertyID	1		String	A unique ID for the property
../Block/BlockID	1		String	A unique identifier for the block
../Block/ConfirmationID	1		String	A block confirmation ID
../ Block /ExternalReferences	0..1		Array	A collection of external references

../ ExternalReferences/External Reference	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, may have different references for each of these three systems
../ExternalReference/ID	1		String	A string that uniquely identifies the system that uses the reference For example, the specific OTA
../ExternalReference/Name	1		String	Name of the external reference
../ExternalReference/IsPointO fSale	1		Boolean	When true, the external reference is the source of sale
../ExternalReference/Type	0..1		String Enumeration	Define the type of the profile if the external reference is a profile linked to the reservation Available value: • Customer • GDS • Corporatioin • TravelAgent • Wholesaler • Group • TourOperator • CRO • RepresentatiionCompany • InternetBroker • Airline • Hotel • CarRental • CruiseLine • Employee • EventHost • SupplierPartner • BillingContact • AuthorizedSigner • GeneralServiceContractor • Arranger

				• 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	An enumerated list used to specify the type of block: • Block • Allotment • Group
../Block/Status	1		String Enumeration	An enumerated list used to specify the status of the block; effects on revenue are dependent on your system and business practices The available values are: • 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	An enumerated list used to specify the type of unit The available values are: • 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

				• 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: • 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: • 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: • 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: • 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 be 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: • 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: • 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:

```xml
<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>
```

```xml
<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>
```

```xml
                <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>
```

```xml
<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>
```

```xml
<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>2018-12-20</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>
```

```xml
                    <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:

```json
{
   "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"
            }
        ],
        "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"
                }
            ]
        },

        "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/TranactionStatus	0..1		String Enumeration	The physical status of the check in the POS system at the time the message is created Available options: • 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 it's 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		CustomerNameType	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: • Home • Business
../Address/UseType	0..1		String Enumeration	Describes the use of the address Available values: • 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 systemencoded 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: • 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: • Approver • Originator
Order	0..1		Object	The order from which this check was derived
../Order/Source	0..1		ReferenceID_Type	Specifies where the order orginated (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: • Approver • Originator
../Order/Status	1		String Enumeration	The status of the order Available options: • 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 catetory 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: • 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	Categories to which a modifier belongs For example, Bacon (Menu Item) to a Club Sandwich belongs to multiple categories such as Modifier Food (Category Name) and Food (Category Name) 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)
../Categories/Category	0..n		Array of CategoryType	A single catetory 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	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/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

				For example, Bacon (Menu Item) to a Club Sandwich belongs to multiple categories such as Modifier Food (Category Name) and Food (Category Name) 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)
../Categories/Category	0..n		Array	A single catetory 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	When the modifier 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
../Modifier/BusinessDate	0..1		Date	The business date for the modifier
../Modifier/Status	0..1		String Enumeration	Final status of a modifier Available options: • 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 modifer
../Employee/EmployeeID	1		String	The ID of the employee
../Employee/Role	1		String Enumeration	The role of the employee Available options: • 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
../Commnet/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). |
| ../Measruement/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: • 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
../PriceModifer/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
../PriceModifer/Status	0..1		String Enumeration	Final status of price modifier/discount Available options: • Sale • Cancel • Void • Return
../PriceModifer/StatusComment	0..1		String	A comment entered by the employee related to a change in the status (e.g. a void reason code)
../PriceModifer/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:

				• 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: • LineItem • SaleItem • SaleItemModifier • FeeItem • 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
../PriceModifer/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)
FeeItems	0..1		Object	Fees charged on the transaction
../FeeItems/FeeItem	0..n		Array of FeeTaxType	A fee charged on the transaction
../FeeItem/ID	1		String	The ID for the fee or tax If the ID is not available, the name should be repeated in this field

../FeeItem/Name	1		String	Name of the of the tax or fee; if not available, default with tax or fee ID
../FeeItem/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 |
../FeeItem/Amount	0..1		Decimal	The amount
../FeeItem/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
../FeeItem/IncludedInd	0..1		Boolean	When true, this fee or tax item is included as part of the amount
../FeeItem/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:
- Approver
- Originator |
../FeeItem/Type	0..1		String	Specifies the type of tax or fee (e.g. sales tax, excise tax)
../FeeItem/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:
- LineItem
- SaleItem
- SaleItemModifier
- FeeItem
- TaxItem |
| ../BasisItem/ID | 1 | | String | The ID of the basis item |

../FeeItem/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
../FeeItem/Status	1		String Enumeration	The status of sale item on transaction Available options: • Sale • Cancel • Void • Return
../FeeItem/StatusComment	0..1		String	A comment entered by the employee related to a change in the status (e.g. a void reason code)
../FeeItem/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)
../FeeItem/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: • 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: • 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 ia 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/ManualRetrievalInd	0..1		Boolean	When true the authorization code was manually retrieved When false, the approval was electronically retreived
../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: • 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: • 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: • 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: • Home • Business
../Address/UseType	0..1		String Enumeration	Describes the use of the address

				Available values: • 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.

```xml
<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>
```

```xml
        <AdditionalReference>
            <ID>String</ID>
            <Type>String</Type>
            <SubType>String</SubType>
            <SystemName>String</SystemName>
            <Name>String</Name>
        </AdditionalReference>
    </AdditionalReferences>
    <SourceSystem>Simphony2</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>StarwoodPrefferedGuest</ProgramID>
```

```xml
                    <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>
                    <AgeDemograpic>
                        <Type>Adult </Type>
                        <Count>2</Count>
                    </AgeDemograpic>
                    <AgeDemograpic>
                        <Type>Child</Type>
                        <Count>1</Count>
                    </AgeDemograpic>
                </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>
                        <ClockInfo>
```

```xml
                    <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>
```

```xml
      </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>
```

```xml
            <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>
```

```xml
            </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>
```

```xml
                </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>
```

```xml
        <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>
```

```xml
<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>
```

```xml
            </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.

```json
{
    "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": "Simphony2",
        "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
Mutiple Age Demographics	CustomerCount	
Multiple Employees	EmployeeInfos_EmployeeInfo Employees_Employee	Originator and Approver for the discount
Sale Items with multiple seats	SaleItems/SaleItem/LineItemID 1	
Sale Items with Modifiers	SaleItems/SaleItem/LineItemID 3,6	
Sale Items with Comments	SaleItems/SaleItem/LineItemID 5	
Sale Items with Void	SaleItems/SaleItem/LineItemID 10 ReferenceIDs/ReferenceID2	The ReferenceID is linked to the SaleItem/LineItem (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/LineItemID 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:

```xml
<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>Simphony2</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>
```

```xml
        <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>
                <AgeDemograpic>
                    <Type>Adult </Type>
                    <Count>2</Count>
                </AgeDemograpic>
                <AgeDemograpic>
                    <Type>Child</Type>
                    <Count>1</Count>
                </AgeDemograpic>
            </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>
```

```xml
            </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>BEVBEER03</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>
            <SaleItem>
```

```xml
      <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>
```

```xml
                    <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>
```

```xml
                </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>
```

```xml
        <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>
```

```xml
                    <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>
```

```xml
                    <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>
```

```xml
<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>
```

```xml
                <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>LineItem</Type>
                    <SystemName>Simphony2</SystemName>
                </ReferenceID>
            </ReferenceIDs>
            <SeatNumber>2</SeatNumber>
            <LineItemID>10</LineItemID>
            <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>
```

```xml
                </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 ased 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 of 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:

```xml
<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>
```

```xml
            </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>
                <TaxExemptInd>false</TaxExemptInd>
                <Employees>
                    <Employee>
```

```xml
                <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&amp;B Other</Name>
                <ID>700</ID>
                <Type>Family Group</Type>
            </Category>
            <Category>
                <Name>F&amp;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>
```

```xml
          <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>
       </FeeItem>
    </FeeItems>
    <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>
      <ReferenceIDs>
         <ReferenceID>
            <ID>1139843832239</ID>
            <Type>AccountID</Type>
            <SystemName>Opera</SystemName>
         </ReferenceID>
      </ReferenceIDs>
    </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 usual in a shop scenario
Delivery Fee	SaleItems/SaleItem/LineItem 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*

```xml
<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>Simphony</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>
            <Address>
                <FormattedInd>true</FormattedInd>
```

```xml
                    <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>StarwoodPrefferedGuest</ProgramID>
                <Level>Gold</Level>
                <MemberName>John Doe</MemberName>
            </Loyalty>
        </LoyaltyPrograms>
```

```xml
<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/>
      <Amount>118.00</Amount>
      <Quantity>2</Quantity>
```

```xml
            <TaxExemptInd>false</TaxExemptInd>
            <Employees>
               <Employee>
                  <EmployeeID>9026800017</EmployeeID>
                  <Role>Originator</Role>
               </Employee>
            </Employees>
            <ProductDescription>Sheraton Towel with Logo Large</ProductDescription>
            <SeatNumber>String</SeatNumber>
            <LineItemID>1</LineItemID>
            <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>
            <LineItemID>2</LineItemID>
            <Cost>0.00</Cost>
         </SaleItem>
      </SaleItems>
      <TaxItems>
         <TaxItem>
            <ID>1001</ID>
```

```xml
            <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>
                  <Surname>Doe</Surname>
                  <Name>Jane Doe</Name>
```

```xml
                <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>
```

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) and the Point of Sales (POS) system 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 strategies that follow 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 an event notification except the event source is polled to determine and collect any events that have occurred 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 previous read. This typically requires that rows have either a generation column or a time and date stamp. This also requires the understanding of the data and table structures and may require multiple queries or joins to extract all of the required information. The extract can then be transformed and loaded to the analytics system.

5.1.5 Data or Transaction Log Read

It may not be possible to directly read 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 have an ability to 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 there is information available to read.

It is recommended to use standard web protocols for the actual transfer of 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 only use the secure versions of the protocols, which are the ones we have listed. You are of course free to go your own direction and decide to 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 CANNOT 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 for the specifications to be implemented as they are completed and published.

The standard you are reading incudes the first phase which covers Financial Transactions, Reservations and Group Blocks and the second phase which covers Point of Sale (POS). As of March 2021, the third phase is being chartered and may include Profile, Guest Request or other options which are under consideration.

7 Glossary of Terms

Customer Relationship Management (CRM) System

A platform used to manage relationships with guests to improve interactions with them.

Central Reservation System (CRS)

A platform used by hotels to centrally manage and distribute room inventory, rates and reservations.

General Data Protection Regulation (GDPR)

A regulation in the European Union (EU) law on data protectionand privacy in the EU and the European Economic Area (EEA). It also addresses the transfer of personal data outside of the EU and EEA areas