HL:KRATISI

booking management web services

Mav Peri

Draft specification of the Holiday Lettings Kratisi platform (booking management web services).

holidaylettings.co.uk
UK's No1 for holiday homes worldwide
a tripadvisor company

Table of contents

2

holidaylettings.co.uk

UK's No1 for holiday homes worldwide

a tripadvisor company

# 1 Overview of the platform

Please note this is draft.

Before you can use the booking management platform you will need to have your account activated and setup. Please contact your HL account manager for more information.

holiday**lettings**.co.uk

UK's No1 for holiday homes worldwide

a 🔴 trip**advisor** company

1.1 Complete API integration

The booking management platform allows a property partner to integrate their system with the HL:kratisi platform. You will receive each booking as a separate message (sample xml message in section 2.1), as and when it happens, and you will be able to provide update messages back to the HL platform for each booking.

In a nutshell, as each holidaymaker completes an online booking at holidaylettings.co.uk, the platform will push each booking as a separate http post request to the partner. The XML message will be contained in the body of the request.

The system expects a success acknowledgement message back for each booking message your endpoint consumes. Failure to acknowledge the message will mean that you will have to use our recovery mechanism (see section 2.3) to retrieve them and update them.
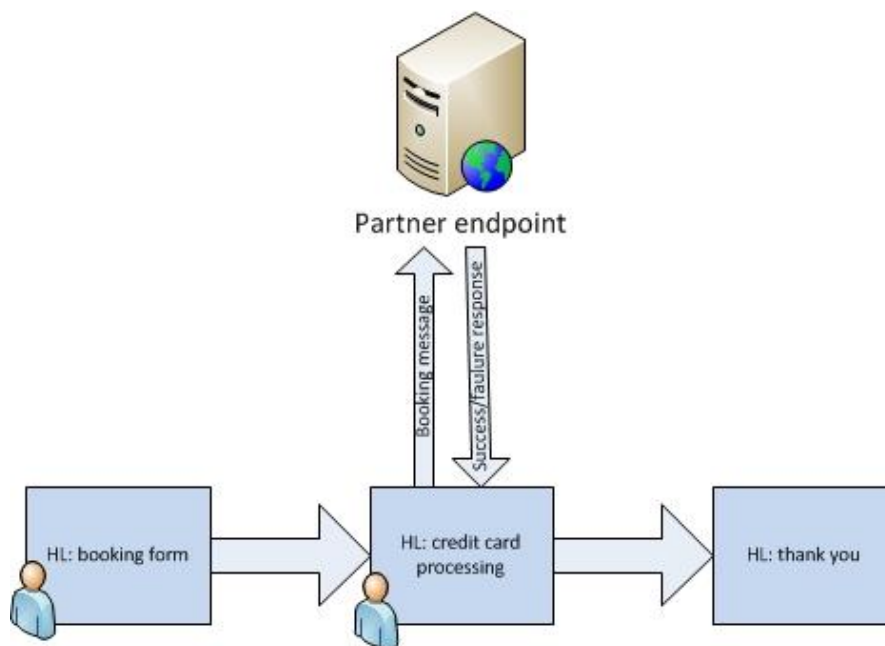
1.2 Partial integration (partner based checkout)

This section applies to partners that use checkout payment pages provided by a third party (like sage page).

We will transmit all relevant booking information to the partner's endpoint by posting the booking and redirect the holidaymaker to the partner's site (for information passed see section 2.1, no credit card details will be contained). The holidaymaker should not need to type any information other than their credit card details at the partner's site unless there is an issue with the booking.

Once the transaction is complete and payment has been processed, the partner should redirect the user to the HL thank you page.
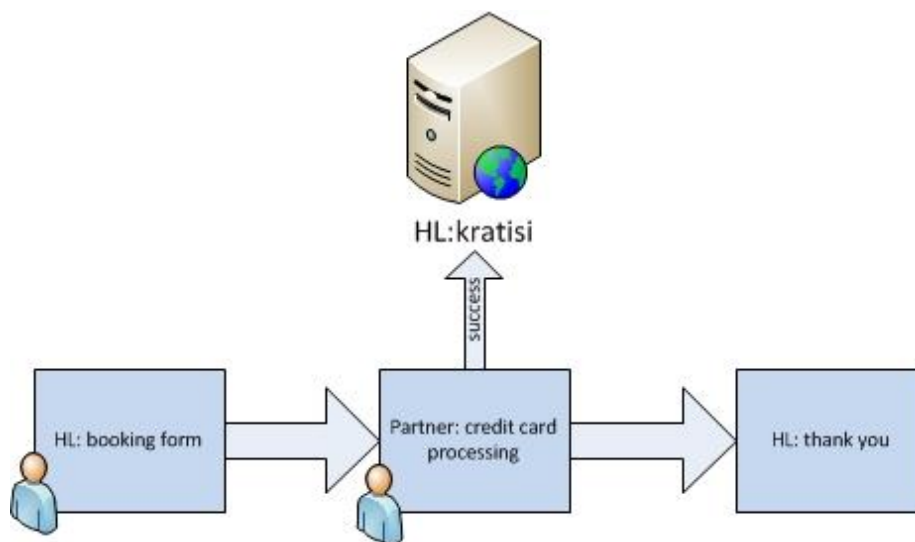
Please note that the content loaded from the partners site via iframe needs to be using https protocol and the server must have a valid SSL certificate and ensured that all resources in the iframe are valid https requests (for example images).

[to investigate]
Option to call partners site before sending the customer to complete transaction at the partner's site to ensure it's valid.

holidaylettings.co.uk

UK's No1 for holiday homes worldwide

a 🔵 tripadvisor company

1.2.1   Book now

Kratisi will present the book now button based on the availability data for the property (see separate API for updating availability data) and on tariff data (see separate api for updating tariff data). If there is no valid tariff or valid availability we will not present the book now option (see figure 1.2.1.a for the logic we implement at the HL site).
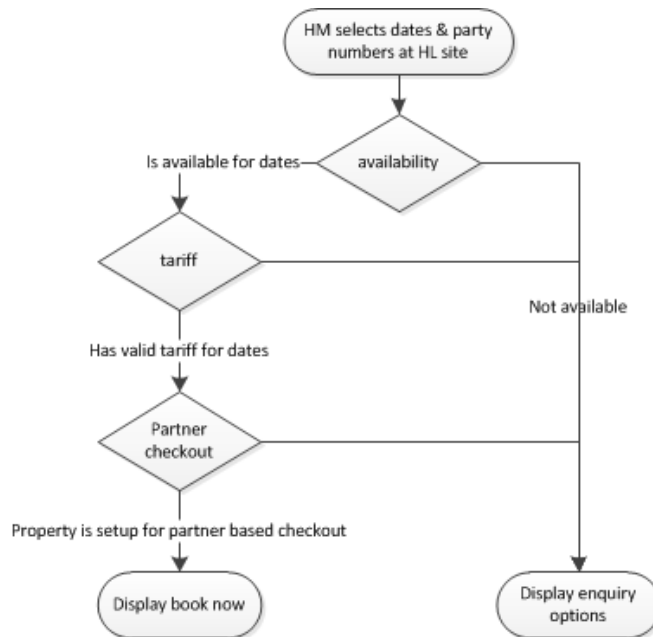
figure 1.2.1a

Once the holiday maker selects specific dates and party details and select the book now option, Kratisi will make a call to the partners site to confirm that the parameters are acceptable (see sample confirmation response).

If the parameters are not acceptable (for example property already booked, the partner's site must respond with a user friendly message which can be presented to the holiday maker (max of 100 chars length).

In the event of failure the HL website will display a message your booking cannot be processed at this time. The failure will be recorded so that failures across systems can be monitored.

If the parameters are acceptable the partner's site must respond with the available extras for the property in the following format. Any surcharges for the credit card must also be presented at this stage.

The logic implemented once the booked now button is clicked is as per figure 1.2.1.b.

6

holidaylettings.co.uk
UK's No1 for holiday homes worldwide
a ⊙⊙ tripadvisor company

```
                          ┌──────────────────┐
                          │ HM clicks book now│
                          └──────────────────┘
                                   │
                        Request confirmation response
                                   │
                                   ▼
                            ◇ Confirmation ◇──── Partners site responds
                            ◇   response   ◇              │
                                   │                      │
              Partners site does not                      ▼
              Respond timely (>2secs)              ◇   Process    ◇
                     │                             ◇ confirmation ◇
                     │────── Invalid response ─────◇  response    ◇
                     │                                    │
                     │                              Valid response
                     │                                    │
                     │                                    ▼
                     │────────── false ──────────── ◇  Booking   ◇
                     │                               ◇ acceptable ◇
                     │                                    │
                     │                             Display valid extras
                     ▼                                    │
          ┌────────────────────┐                         ▼
          │ Display booking not │            ┌────────────────────┐
          │ possible at this time│           │ Display any extras  │
          └────────────────────┘            │ and proceed to next │
                                             │        step         │
                                             └────────────────────┘
```
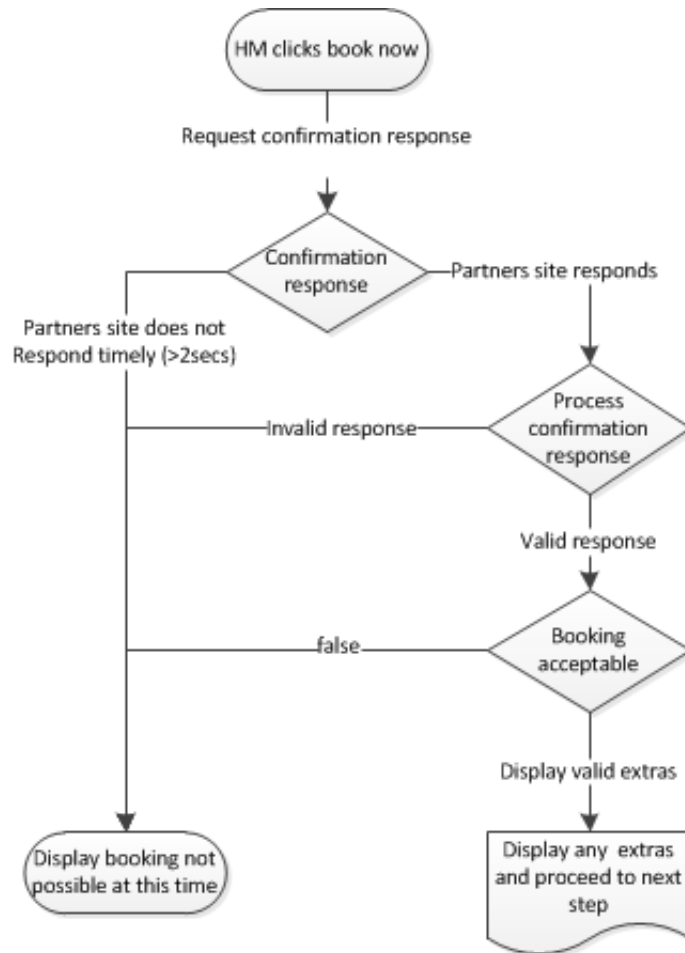
figure 1.2.1.b

Sample confirmation response.

```
<kratisi-partner-confirm>
<rental_unit_id>13635</rental_unit_id>
<owner_id>27494</owner_id>
<startdate>2012-08-04T15:00:00</startdate>
<checkoutdate>2012-08-11T15:00:00</checkoutdate>
<numbernights>7</numbernights>
<currency>GBP</currency>
<price>510.00</price>
<discount>0.00</discount>
<mandatoryextrasincluded>true</mandatoryextrasincluded>
<includesVAT>20.0</includesVAT>
<extras>
<extra>
<name>
<![CDATA[ Booking fee ]]>
</name>
<unit>booking</unit>
<max>1</max>
<price_per_unit>26.40</price_per_unit>
<due>deposit</due>
<type>required</type>
</extra>
<extra>
<name>
<![CDATA[ Pets ]]>
</name>
<unit>week</unit>
<max>1</max>
<price_per_unit>20</price_per_unit>
<due>balance</due>
<type>optional</type>
</extra>
</extras>
<payments>
<deposit>
<type>absolute</type>
<amount>153.00</amount>
</deposit>
<balance>
<due>Due Sat 09 Jun 2012</due>
<amount>357.00</amount>
</balance>
</payments>
<booking_acceptable>true</booking_acceptable>
<message>Available</message>
</ kratisi-partner-confirm >
```

Confirmation message

	Description	Required	Type
rental_unit_id	The holiday lettings property id.	Yes	Integer
owner_id	The holiday lettings property id	Yes	Integer
startdate	The date the Holiday maker will start the stay in the property	Yes	Date ISO 8601 date
checkoutdate	The date the holiday maker will checkout (no night stay on that day)	Yes	Date ISO 8601 date
numbernights	The number of nights the accommodation is booked for	Yes	Integer
currency	The currency used for the transaction Currently supported currencies GBP Please make sure that you will always respond with one of the currencies above. If a currency is not supported the system will assume a failure.	Yes	String
price	The total price for the booking	Yes	Double
discount	The price of any discount. Must be the absolute value of the discount	Yes	Double
mandatoryextrasincluded	Indicates whether the cost of the required extras is included in the quoted price	Yes	String : true or false
includesVAT	If present confirms the quoted price is inclusive of VAT and at what rate	No	Double
extras/extra/ name	The name of the extra type, up to 100 chars. This will be displayed as is on the HL website. For example it could be pet charge (per pet) booking fee linen charge	Yes	String
extras/extra/unit	Acceptable values of extra unit are week person night booking For example An extra of unit person with a value of £15 for a booking of 5 people will be charged 5 x £15. A unit type booking will be chargeable on per booking basis.	Yes	String
extras/extra/ max	The maximum number of units that are allowed to be charged per booking of this extra type.		
extras/extra/ price_per_unit	The price per unit of extra	Yes	Double
extras/extra/due	When is the item payable. Allowed values:	Yes	String

	deposit (the item will be charged in addition to the deposit) balance arrival		
extras/extra/ type	Whether or not this extra type must be added to the booking or not. Allowed values are required optional If you must charge a booking fee, you need to set the type as required. The item will be added to the booking.	Yes	String
Payments/ deposit/amount	The value of the deposit.	Yes	Double
Payments/ deposit/type	Is the deposit amount a percentage or an absolute value. Allowed values are : absolute percent		String
payments/ balance/due	The date when the deposit is required by.	Yes	Date ISO 8601 date
booking_acceptable	Indicates whether or not kratisi can proceed with the checkout. True means that the values we have passed are acceptable. False means that there is something wrong with the parameters we have passed and we cannot proceed.	Yes	Boolean
Message	The holiday maker friendly message to be displayed. Max of 100 chars. Example usage Dates not available Booking cannot start on a Monday	Yes	String

1.2.2   Processing logic
[flow chart here]

1.3   Booking updates

The platform also provides a web service to enable you to update each booking where applicable. Updates include booking cancellations, booking pay schedule item status changes (deposit paid, balance paid, refunds, partial refunds, chargebacks etc)

holidaylettings.co.uk
UK's No1 for holiday homes worldwide
a tripadvisor company

Partner updates → HL:kratisi

holidaylettings.co.uk

UK's No1 for holiday homes worldwide

a **tripadvisor** company

2   Booking new (push)

Our system will make an http post request to the partner's endpoint containing a new booking. The message will be in XML format contained in the body of the request.

Http headers will provide some metadata for each booking.

The requests will be encoded in UTF8 and will be of type application/xml.

1. Booking message

Entity	Description	Always present	Type
Id	The id of the booking	Yes	Integer
Created_dt	ISO date	Yes	date
Enquiry_id	The HL enquiry id associated with this booking	No some bookings will not have an enquiry id.	Integer
Currency	ISO code	Yes	string
Total	The amount of the booking excluding tax	yes	Float
Tax	The tax amount of the booking=g	yes	float
Booking_items	A list of the booking items	yes	Collection of booking items
Guests_adult	Total number of adults in the party of this booking	Yes	Integer
Guests_children	Total number of children in this booking	Yes	Integer
Hm_title	The title of the person making the booking	Yes	String
Hm_fname	First name of the person making the booking	Yes	String
Hm_lname	Last name of the person making the booking	Yes	String
Hm_tel	Telephone number of the person making the booking	Yes	String
Hl_mobile	The mobile telephone number of the person making the booking	Yes	String
Hl_email	The email address of the person making the booking	Yes	String
Hl_add1	The first line of address of the person making the	Yes	String

	booking		
Hl_add2	The second line of address of the person making the booking	No It may be blank	String
Hl_post_code	The postcode of the address of the perso_emailn making the booking	Yes	String
Hl_town	The town of the person making the booking	Yes	String
Hl_county	County or stage of the holiday maker	Yes	String
Hl_country	ISO code of the country of the holidaymaker	Yes	String
Booking_status	The status of the booking (for example new, see section 4.1)		
Booking_payment_status	The payment status of the booking (for example unpaid, see section 4.2)		
Payment_details	Contains the payment information See table 2	Yes	
booking_items	Contains the booking items information See table 3	Yes	

2. payment details reference

Entity	Description	Always present	Value
Payment_details	The type of payment method 1 is credit card/debit card	Yes	Integer
Card_no	The card number	no If method=1	Integer
Expiry	The expiry date of the card in mm-yy format	no If method=1	String
Start	The start date of the card in mm-yy	no If method=1	String
cvs	Cvs number of the card	no If method=1	integer
Name_on_card	The name of the card holder as is on the card	no If metho=1	Integer

3. Booking item

Variable	Description	Always present	Type
Id			
Description	Deposit, balance, pet charges etc	Yes	String
Value	The value of the item excluding tax	Yes	float
Tax	The tax value of the item	Yes	float
Home_id	The HL property id	No	Integer
Start_dt	Start date of the booking item in ISO format	No	date
End_dt	End date of the booking item in ISO format	No	date
Previous_calendar_state	The previous HL calendar state (once the booking is processed availability will be changed to booked)		

4. Booking pay schedule item

Variable	Description	Required	Type
Id			
Description			
Created_dt			
Due_date			
Amount			

holidaylettings.co.uk
UK's No1 for holiday homes worldwide
a tripadvisor company

2.1 Sample booking message

Below you can see a sample booking message posted from the platform relating to a booking.

```
<booking>
<id>1</id>
<partnerbookingreference>BR9876</partnerbookingreference>
<created_dt>2012-02-27T12:07:27+00:00</created_dt>
<enquiry id="1"/>
<currency>gb</currency>
<total>599.99</total>
<tax>128.98</tax>
<guests_adult>5</guests_adult>
<guests_children>2</guests_children>
<hl_title>mr</hl_title>
<hl_fname>mav</hl_fname>
<hl_fname>peri</hl_fname>
<hl_tel>032132-123321321</hl_tel>
<hl_mobile>032132-123321321</hl_mobile>
<hl_email>mav.peri@holidaylettings.co.uk</hl_email>
<hl_add1>110 street name</hl_add1>
<hl_add2/>
<hl_post_code>ox2 ox2</hl_post_code>
<hl_town>oxford</hl_town>
<hl_county>oxfordshire</hl_county>
<hl_country>gb</hl_country>
<booking_status>new</booking_status>
<booking_payment_status>new</booking_payment_status>
<payment_details>
<method>1</method>
<card_no>1111222233334444</card_no>
<expiry>08-12</expiry>
<start>08-12</start>
<cvs>196</cvs>
<name_on_card>mav peri</name_on_card>
</payment_details>
<booking_items>
<item>
<id>1</id>
<description>booking item A description here,</description>
<value>599.99</value>
<tax>128.98</tax>
<home_id>5789</home_id>
<start_dt>2012-04-27T12:07:27+00:00</start_dt>
<end_date>2012-05-27T12:07:27+00:00</end_date>
<previous_calendar_state>availabe</previous_calendar_state>
</item>
<item>
<id>2</id>
<description>booking item B description here,</description>
<value>599.99</value>
<tax>128.98</tax>
<home_id>5789</home_id>
<start_dt>2012-04-27T12:07:27+00:00</start_dt>
<end_date>2012-05-27T12:07:27+00:00</end_date>
<previous_calendar_state>availabe</previous_calendar_state>
```

Formatted: Font: 10 pt

Formatted: Font: (Default) +Headings (Calibri), Font color: Auto, English (U.S.)

holiday**lettings**.co.uk
UK's No1 for holiday homes worldwide
a tripadvisor company

```
</item>
<item>
<id>3</id>
<description>pet charge</description>
<value>19.99</value>
<tax>3.98</tax>
</item>
</booking_items>
<booking_schedule>
<item>
<id>2</id>
<description>deposit</description>
<created_dt>2012-04-27T12:07:27+00:00</created_dt>
<due_date>2012-04-27T12:07:27+00:00</due_date>
<amount>100.00</amount>
</item>
<item>
<id>3</id>
<description>balance</description>
<created_dt>2012-04-27T12:07:27+00:00</created_dt>
<due_date>2012-04-27T12:07:27+00:00</due_date>
<amount>499.97</amount>
</item>
</booking_schedule>
</booking>
```

2.2   Succesful acknowledgement of booking message

If the partners receives a message successfully, our system will expect the following response.

2.3   Failure to receive a booking

The partners server must respond with http error 500 in the event of failure.

[to discuss further]

holidaylettings.co.uk

UK's No1 for holiday homes worldwide

a tripadvisor company

3   Booking update

This section provides an overview of the methods supported via https post request. The xml needs to be part of the body of the request.

3.1   Booking paid

This message is necessary when the holidaymaker completes the checkout at the partner's site (to use sagepay, paypal etc).

Endpoint: https://kratisi.holidaylettings.co.uk/booking/paid

Post parameters: username, password, message(as per below)

```
<booking_paid>
        <booking_id>312</booking_id >
        <partnerbookingreference>BR9876</partnerbookingreference>
        <username>yourusername</username>
        <password>yoursecurepassword</password>
        <payment_date>{iso date}</payment_date>
        <amount>599.99</amount>
        <currency>GBP</currency>
</booking_paid>
```

3.2   Booking cancel

Using this method you can send booking cancellations.

Booking cancellation messages need to be sent using an https post request to the following URI

Endpoint: https://kratisi.holidaylettings.co.uk/booking/cancel/

Using this method you can cancel a booking.

```
<booking_cancelled>
        <booking_id>312</booking_id >
        <partnerbookingreference>BR9876</partnerbookingreference>
        <username>yourusername</username>
        <password>yoursecurepassword</password>
        <payment_date></payment_date>
        <reason>holiday maker changed mind (again)</reason>
</booking_cancelled>
```

holidaylettings.co.uk

UK's No1 for holiday homes worldwide

a tripadvisor company

3.3 Booking schedule item update

Using this method you can update the following values of the booking pay schedule details for a given booking.

Booking schedule item update messages need to be sent using an https post request to the following URI

https://kratisi.holidaylettings.co.uk/bookingscheduleitem/update/

You can provide updates for the following items

- payment status (see section 4.3)
- payment date (iso format of the timestamp of when the payment was made).

```
<booking_schedule_item>
        <username>yourusername</username>
        <password>yoursecurepassword</password>
        <booking_schedule_item_id>31232131</booking_schedule_item_id>
        <payment_status>paid</payment_status>
        <payment_date></payment_date>
</booking_schedule_item>
```

If the update is successful our system will respond with

3.4 Booking payment failed
This message is necessary when the holidaymaker fails to complete the checkout at the partner's site.

Endpoint: https://kratisi.holidaylettings.co.uk/booking/paymentfailure

Post parameters: username, password, message(as per below)

```
<booking_notpaid>
        <booking_id>312</booking_id >
        <partnerbookingreference>BR9876</partnerbookingreference>
        <username>yourusername</username>
        <password>yoursecurepassword</password>
        <message>timed out</message>
</booking_notpaid>
```

Field Code Changed

Formatted: Font: +Headings (Calibri)

18

holiday**lettings**.co.uk
UK's No1 for holiday homes worldwide
a tripadvisor company

holiday**lettings**.co.uk
UK's No1 for holiday homes worldwide

a **⊙⊙ trip**advisor company

4   Permitted status values

This section provides a breakdown of the different status values.

4.1   Booking status

The booking status can have any of the following values. Please note that the status of the booking is inferred from the statuses of the booking pay schedule items.

New	**New booking not paid for**
Complete	Booking has been completely paid for.
Cancelled	The booking has been cancelled

4.2   Booking pay status

Pending	**None of the booking schedule pay items have been paid**
Paid	All booking pay schedule items have been paid
Partially paid	1 or more of the booking pay schedule items has been paid
Cancelled	All booking pay schedule items have been cancelled
Refunded	All booking pay schedule items have been refunded
Partially refunded	1 or more of the booking pay schedule items has been refunded
chargeback	A charge back has been received for 1 or more of the booking pay schedule items

4.3   Booking pay schedule item status

Pending	**Not paid**
Paid	Item has been paid
Cancel	Item has been cancelled
refunded	Item has been refunded
Partially refunded	Item has been partially refunded
chargeback	Item has a chargeback

5 Third party bookings

Partners can transmit to HL new bookings that take place outside the HL system.

endpoint: https://kratisi.holidaylettings.co.uk/booking/new

Post parameters: username, password, booking message (as per section 2.1)

holiday**lettings**.co.uk
UK's No1 for holiday homes worldwide
a tripadvisor company

6 Key concepts

Item	Description
Booking pay schedule items	Each booking will be paid with a number of pay schedule items. In effect they are the payment terms of the booking (typically each booking will be paid using deposit and balance). You can have bookings that will be paid all upfront and will contain a single booking pay schedule item.
Allowed ip range	
Booking	The reservation made by the holidaymaker.

7 IP restrictions

Kratisi will make http posts to the parnter's platform from the following IP range:

[to be confirmed]

There is no IP restriction from the partner's platform to kratisi.

8 Sample use cases

9 To do

10 Document revision history

Version/date	Author	Description
0.1	Mav Peri	Draft document
0.1.2	Mav Peri	Added limit by IP, parther based checkout
0.1.3	Mav Peri	Revised to include call back to partners system for extras and confirm availability, logic on book

holidaylettings.co.uk
UK's No1 for holiday homes worldwide
a **tripadvisor** company

		now button and processing confirmation message.
0.1.4	Mav Peri	Added bookings initiated outside HL Added some endpoint information
0.1.5	Martin Robertson	Provide for discount as %; partner booking reference; new endpoint for payment failure; VAT & mandatory-extras 'included' flags.