

BOIPA Gateway

AUTH/PURCHASE/VERIFY (Hosted Payment Page Integration) Version 5.8 3DS V2.x, September 23, 2020

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Document Purpose

The purpose of this document is to describe the AUTH/PURCHASE/VERIFY (Hosted Payment Page Integration) API Operation to enable merchant developers to integrate their webpages with the BOIPA Gateway. Refer to the BOIPA Gateway – 0 – Overview document for how this API Operation is used in the merchant processes.

The AUTH/PURCHASE/VERIFY (Hosted Payment Page Integration) API Operation allows the merchant using the BOIPA Gateway's Hosted Payment Page (Payment Form/Cashier) to take payment card data in PCI Compliant environment to initiate authorise and purchase payment card transactions, or the verification of payment card details.

PSD2, SCA & 3DSV2.x Considerations

Changes to the Payment Services Directive (PSD2), embodied in Strong Customer Authentication (SCA) and the updated Third Domain Secure Version 2.1 & 2.2 (3DSV2.x), have added to the data required by Card Schemes. Issuers, Acquirers and Payment Service Providers (PSPs), including the BOIPA Gateway have been upgrading their systems to take account of the new data requirements.

The one overriding change to card payment transactions that should be understood by all merchants is that all card payment transactions will now be processed through 3DS Authentication. Therefore, merchants will not be able to switch off Authentication processing, except under exceptional circumstances agreed with the Acquirer.

The new data requirements are primarily focussed on providing improved security to the cardholder in the prevention of fraud and card misuse.

Therefore, additional data parameters are provided for in the Session Token Request (section 1.1). In addition, the requirements for some existing parameters have changed in that some parameters that were optional are now mandatory for 3DSV2.x processing. The failure to provide these parameters will automatically channel the transaction through the current 3DS Version 1.0 authentication method.

At the time of writing, it is not known when 3DS Version 1.0 will be retired. Although the Card Schemes have stated that it will be retired, they have not yet provided and firm indication of when this may happen.

To assist the merchant's business analysis of the Session Token Request (section 1.1), the parameters have been grouped with heading rows to provide an overview of those parameters.

To assist the development of integration the new and changed parameters have been shaded in green.

Note: as much information should be supplied as is available to the merchant to assist the Issuer with providing a Frictionless Flow, i.e. to authenticate a payment card transaction without the need to challenge the cardholder.

Change Log

Version	Date	Author	Description of Change
5.0	21/04/20	Vaughan Morgan-Jones	Section 2.1.2: SCA/3DS V2.x parameters added
5.1	25/05/20	Vaughan Morgan-Jones	Section 2.1.2: • Changed cardOnFileReason to be completed by all merchants Required for authentication purposes • Added cardOnFileMaxPayments All Sections: Examples removed – to be reworked in future version App F: Reworded explanation for merchantAuthData
5.2	12/06/20	Vaughan Morgan-Jones	Section 2.1.2: Changes made to External Authentication parameters to provide enumerated values for protocolVersion and require the data for all MPIs, not just Redsys.
5.3	07/07/20	Vaughan Morgan-Jones	Section 2.1.2: • sdkAppInfo: Added to support App Flow • cardOnFileInitialTransactionId: Added note
5.4	24/07/20	Vaughan Morgan-Jones	Section 1.1: Added <i>mmrpOrderNumber</i> Corrupted document rebuilt
5.5	03/09/20	Vaughan Morgan-Jones	Section 1.1: Removed values 07 & 08 from merchantChallengeInd
5.6	15/09/20	Vaughan Morgan-Jones	 Section 1.1: Changed rules for customer address data Added "Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information." to Customer Address & IP Address parameters Removed all references to Quick Sales, which are not offered in the EU
5.7	17/09/20	Vaughan Morgan-Jones	Section 1.1.2: Changed rpDueDate = 0 when rpFrequency = 20 & 23
5.8	23/09/20	Vaughan Morgan-Jones	Section 1.1.2: Changed Requirement for merchantNotificationUrl to 'N'

1 Session Token API Operation

1.1 Session Token Request

1.1.1 Format

POST Request to Session Token Request URL (see Section 3 of the BOIPA Gateway – 0 – Overview document)

1.1.2 Definition

Parameter	Data Type	Required	Description
Security Data			
Mandatory to identify the merchant in the I	BOIPA Gateway		
merchantId	Integer (18)	Υ	The merchant's account identifier for the merchant in the BOIPA Gateway provided at on-boarding
password	String (64)	Υ	The merchant's account password for API Operations in the BOIPA Gateway provided at on-boarding
Transaction Data			
The Transaction Data defines the type of tra	insaction the mer	chant is requ	esting the BOIPA Gateway to perform, how the transaction result will be managed, and complimentary data
required by the Authentication and Authori	sation Processes.	The transact	tion result can be the Authentication or Authorisation response.
action	String (enum)	Y	 Must be "AUTH", "PURCHASE" or "VERIFY" Conditions: For EVO Mexico/Banamex eGlobal Installments Plans this must be "AUTH" or "PURCHASE"; plans cannot be initiated from a "VERIFY" operation For Recurring Payments, i.e. where rpPlanType > 0
firstTimeTransaction	Boolean	N	A flag to indicate if the transaction is the customer's first. For some merchant configurations, this forces 3D Secure processing. Note: if a customerId value is not provided, first-time transaction is assumed
timestamp	Integer (13)	Υ	Milliseconds since 1970-01-01 00:00:00

Parameter	Data Type	Required	Description Description
merchantChallengeInd	String (enum)	N	Merchant Challenge Indicator: Indicates whether the merchant is requesting a challenge for this transaction, for local/regional mandates or other reasons. It is highly recommended that this parameter is supplied, even if there is no preference ('01') For example: for Payment Authorisations (action = 'AUTH' or 'PURCHASE'), a merchant may have concerns about the transaction, and request a challenge. Some BOIPA Gateway rules will override a merchant's requirement not to challenge the cardholder: 1. A challenge will always be requested for Non-Payment Authorisations (action = 'VERIFY') 2. A challenge will always be requested for cardOnFileType = 'First' 3. A challenge may be requested for if the Acquirer's Transaction Risk Analysis has been performed and requires a challenge request Values accepted: 01 = No preference - Default if parameter not provided 02 = No challenge requested 03 = Challenge requested (merchant preference) 09 = Challenge requested - the merchant requests a whitelist prompt if a challenge is required Note: Values '04', '05', '06', '07', '08' and are reserved for BOIPA Gateway use Netcetera Constraint: Value '09' is only available when Netcetera initiates authentication with EMV 3DS 2.2.0 version or greater. In this instance, the threeDSPreferredProtocolVersion and enforcethreeDSPreferredProtocolVersion parameters should be set appropriately
merchantDecReqInd	String (enum)	N	Merchant Decoupled Request Indicator: Indicates whether the merchant requests the Issuer to utilise Decoupled Authentication and agrees to utilise Decoupled Authentication if the Issuer confirms its use. Values accepted: Y = Decoupled Authentication is supported and preferred if challenge is necessary N = Do not use Decoupled Authentication - Default if not provided Netcetera Constraint: Parameter is only available when Netcetera initiates authentication with EMV 3DS 2.2.0 version or greater. In this instance, the threeDSPreferredProtocolVersion and enforcethreeDSPreferredProtocolVersion parameters should be set appropriately
merchantDecMaxTime	Integer (5)	N	Merchant Decoupled Request Maximum Wait Time: Indicates the maximum amount of time that the merchant will wait for an Issuer to provide the results of a Decoupled Authentication transaction (in minutes). Valid values are between 1 and 10080. If not provided, it is expected that the Issuer will use 10080 minutes (7 days) as a default. Netcetera Constraint: Parameter is only available when Netcetera initiates authentication with EMV 3DS 2.2.0 version or greater. In this instance, the threeDSPreferredProtocolVersion and enforcethreeDSPreferredProtocolVersion parameters should be set appropriately
channel	String (enum)	Y	The transaction channel through which the payment was taken: "ECOM" for card present e-commerce type transactions that are customer initiated, usually through a website checkout screen "MOTO" for card not present transactions that are merchant initiated, usually through a virtual terminal type application developed by the merchant

Parameter	Data Type	Required	Description
country	String (enum)	Υ	The ISO alpha-2 code country in which the transaction takes place, as defined in the ISO 3166 standard If this is not known or unavailable, the customerAddressCountry will be used.
allowOriginUrl	String (256)	Υ	The merchant's URL that will make the Auth/Purchase/Verify Request (see Section 2.1) This will usually be the URL of the customer's browser. Cross-Origin Resource Sharing (CORS) headers will allow only this origin
merchantNotificationUrl	String (200)	N	The merchant's server-to-server communications URL, to which the Transaction Result Call will be sent It is highly recommended that this parameter is provided, so that the merchant receives a timely result of the payment authentication and authorisation in the Transaction Result Call. If not provided, no immediate notification will be sent to the merchant. The transaction result will be shown in the BOIPA Gateway Back-Office or it can be retrieved using the GET STATUS API Operation.
merchantLandingPageUrl	String (200)	N	The URL to which the customer's browser is redirected for success or failure messaging
merchantLandingPageRedirectMethod	String (enum)	N	Determines the method by which the customer is redirected to merchantLandingPageUrl Permitted Values 'POST', 'GET' If the parameter is not included, the API process defaults to POST If the parameter is included and is 'POST', the API process uses POST If the parameter is included and is 'GET', the API process uses GET If the parameter is included and is empty/blank, a Session Token Response – Not Processed (section 1.3) with an error is returned

AUTH/PURCHASE/VERIFY (Hosted Payment Page Integration) Required Description

Parameter	Data Type	Required	Description
Payment Method Data The Payment Method Data defines how The action = 'VERIFY' can only be perform The following parameters are required for paymentSolutionId = 500 • specinCreditCardToken	med on payment car		to pay for an Authorisation or Purchase (action = 'AUTH' or 'PURCHASE')
paymentSolutionId	Integer (18)	N	The BOIPA Gateway Payment Solution Identifier See BOIPA Gateway – 7 – GET AVAILABLE PAYMENT SOLUTIONS for valid values
specin Credit Card Token	String (100)	С	The payment card token received in the TOKENIZE API Operation, see BOIPA Gateway – 1 – TOKENIZE document Conditions: 1. This parameter is required for Card Payments 2. For OneClick transactions this must be the data.oneClickPaymentMethods.payToken returned in the Get OneClick Payment Methods Response – Processed
spec in Process Without Cvv 2	Boolean	N	A flag that indicates whether the payment card transaction is to be processed with or without the Card Verification Value [CVV]. The CVV is provided in the <i>specinCreditCardCVV</i> parameter in the Auth/Purchase/Verify Request (Section 2.1). If not provided, a true value is assumed. If the <i>specinCreditCardCVV</i> parameter is then not provided, the Auth/Purchase/Verify Request will be rejected by the BOIPA Gateway. This requires prior authorization by the BOIPA Gateway and acquirer. Note: The CVV is also known as Card Security Code (CSC), Card Verification Data [CVD], Card Verification Number, Card Verification Value Code, Card Verification Code [CVC], Verification Code [V-code or V code], or Signature Panel Code [SPC])
forceSecurePayment	Boolean	С	For payment card transactions only, if the merchant has 3D Secure disabled for all transactions as a rule, this field can be used to force 3D Secure processing for individual transactions: • If True: forces 3D Secure processing no matter the routing rules • If False, not provided or NULL: the 3D Secure routing rules in the BOIPA Gateway are used If 3D Secure processing is required, the 3DS Redirection Response (section 2.2) is sent Condition • This parameter is only valid for 3DS Version 1.0. In 3DS Version 2.x processing, the merchantChallengeInd is used to determine the merchant's preference for Authentication processing • If cardOnFileType = "Repeat" the forceSecurePayment parameter should be omitted. If it is included with any value (true, false, or empty) the parameter will be ignored
processUnknownSecurePayment	Boolean	N	Determines how 3DSV1.0 Authentication Response "U" (Unknown) value is processed: If True and 'U' is returned: a Session Token Response – Not Processed (section 1.3) is returned If 3DS Version 2.x Authentication is used, this parameter is ignored. The processing of the 'U' Authentication response is determined by the transaction status reason provided in the 3DS Authentication process.

Parameter	Data Type	Required	Description
Merchant Transaction Data	Butu Type	ricquirea	Description .
	ation about the m	nerchant's ba	ank account, information needed to recognise the merchant in the acquirer and settlement systems, and data
that the merchant wants to add to the trans			
			The merchant's reference for the transaction. If the parameter is empty or omitted, a reference will be
	C (50)		generated by the BOIPA Gateway as a hexadecimal string, and returned in the transaction responses
merchantTxId	String (50)	N	It is highly recommended that a value is supplied to reconcile transactions in the BOIPA Gateway with the
			merchant's own order management system
operatorid	String (20)	N	Identifier of the merchant's operator or agent on behalf of the end customer, if the operation is not
operatorId	String (20)	IN	performed by the merchant, and the merchant wants to track the operator who performed the transaction
brandId	Integer (18)	N	The BOIPA Gateway Brand Id for the merchant's goods or services that was supplied at on-boarding
brandid	integer (10)	IN	If not provided the merchant's default BOIPA Gateway Brand Id will be used
bankMid	String (50)	N	The merchant's Bank MID with the Acquirer.
Darikiviid	3ti iiig (30)	11	Used by the merchant to control which acquirer bank MID will be used for the transaction.
			Sets a minimum transaction value allowed to be processed in the BOIPA Gateway
limitMin	BigDecimal	N	This overrides the minimum value set in the BOIPA Gateway merchant configuration
	(15.2 or 15.3)		It is the merchant's responsibility to set a value that will be accepted by the Acquirer and Issuer involved in the
			transaction process
		N	Sets a maximum transaction value allowed to be processed in the BOIPA Gateway
limitMax	BigDecimal		This overrides the maximum value set in the BOIPA Gateway merchant configuration
	(15.2 or 15.3)		It is the merchant's responsibility to set a value that will be accepted by the Acquirer and Issuer involved in the
			transaction process A free text field for use by the merchant that is returned in the Transaction Result Call (see BOIPA Gateway - 6
freeText	String (200)	N	- TRANSACTION RESULT CALL)
customParam1_OR customParam20_OR	String (50)		20 Text Fields that used by merchants to reconcile transactions performed through mobile applications with
customirarami_on customiraramizo_on	String (50)	N	results from the acquirer. Currently only available for EVO Poland merchants.
s text1, s text2 s text5	String (200)	N	5 Text fields for general use
	3ti iiig (200)	IN	5 Date fields for general use.
d_date1, d_date2 d_date5	Date/Time	N	Format: DD/MM/YYYY hh:mm:ss – the time part can be omitted, resulting in 00:00:00
b bool1, b bool2 b bool5	Boolean	N	5 Boolean fields for general use – accepted values are "true" and "false"
	BigDecimal		5 Numeric fields for general use – a dot "." must be used as a decimal separator, not the comma "," and a
n_num1, n_num2 n_num5	(7.2)	N	thousand separator must not be used
Customer Browser/App/Device Data			
	required to suppo	rt Strong Cu	stomer Authentication (SCA) and 3DS V2.x when an Authentication Challenge (3DS) is required.
			h information should be supplied as is available. This will enable card issuers to provide more Frictionless Flows
in the Authentication processes, where the	cardholder is not	challenged d	uring the transaction.
			Type of device used, accepted values:
userDevice	String (or)	С	• "MOBILE"
USEI DEVICE	String (enum)		"DESKTOP"
			Condition: Required for 3DSV2.x. If not supplied, 3DSV1.0 Authentication will be used
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Parameter	Data Type	Required	Description
userAgent	String (2048)	С	Browser User-Agent: Exact content of the HTTP user-agent header from the browser in which the transaction was performed Note: If the total length of the User-Agent sent by the browser exceeds 2048 characters, the excess content will be truncated. Conditions: Required for 3DSV2.x. If not supplied, 3DSV1.0 Authentication will be used Required if customerBrowser.browserJavascriptEnabled = true
customerlPAddress	String (45)	С	Browser IP Address: IP address of the customer's browser, where the transaction is initiated, as returned by the HTTP headers to the merchant Value accepted: • IPv4 address is represented in the dotted decimal format of 4 sets of decimal numbers separated by dots. The decimal number in each and every set is in the range 0 to 255. Example IPv4 address: 1.12.123.255 • IPv6 address is represented as eight groups of four hexadecimal digits, each group representing 16 bits (two octets. The groups are separated by colons (:). Example IPv6 address:2011:0db8:85a3:0101:0101:8a2e:0370:7334 Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
language	String (enum)	N	The ISO alpha-2 language code, as defined in ISO 639-1 standard, for the language to be used in the Hosted Payment Page, when loaded to the merchant's webpage. • If a supported language code is provided, the language translation will be provided • If not provided or an unsupported language code is provided, the merchant's default language is used [Please consult your eCommerce Support Team for currently supported languages]

Parameter	Data Type	Required	Description				
Transaction Amount Data	Transaction Amount Data						
Transaction Amount Data provides the value	es of the sale.						
amount	BigDecimal (15.2 or 15.3)	С	The total transaction amount, including tax, shipping, surcharge and discount amounts Conditions: If action = "AUTH" or "PURCHASE", if a value is supplied this must be > 0.00 If action = "VERIFY", this must be 0.00 or omitted See Appendix A - UAT Trigger Values				
currency	String (enum)	Υ	The ISO alpha-3 code for the currency as defined in the ISO 4217 standard				
taxAmount	BigDecimal (15.2 or 15.3)	N	Tax amount as a currency value (not percentage) If action = "VERIFY", this must be 0.00 or omitted				
shippingAmount	BigDecimal (15.2 or 15.3)	N	Shipping amount If action = "VERIFY", this must be 0.00 or omitted				
chargeAmount	BigDecimal (15.2 or 15.3)	N	Surcharge amount If action = "VERIFY", this must be 0.00 or omitted				
discountAmount	BigDecimal (15.2 or 15.3)	N	Discount amount If action = "VERIFY", this must be 0.00 or omitted				

Parameter	Data Type	Required	Description Description				
<u>Customer Personal Data</u>	Customer Personal Data						
Customer Personal Data identifies the custo	Customer Personal Data identifies the customer involved in the transaction. The supply and storage of this data is subject to regional restrictions (such as GDPR in the EU).						
-			supplied are customerFirstName and customerLastName, which will allow the merchant to easily identify				
transactions for their customers in the BOIF	A Gateway Back-0	Office Transa	ctions Lists.				
customerFirstName	String (50)	N	First name of the customer				
customerLastName	String (100)	N	Last name, surname or family name of the customer				
			Customer sex:				
customerSex	String (enum)	N	M (male)				
			F (female)				
customerDateOfBirth	Date	N	Customer date of birth – format DD/MM/YYYY				
customerEmail	String (60)	N	Customer email address				
customerPhone	String (100)	N	Customer phone number				
	String (enum)		Type of document used to confirm the customer's identification				
		N	BOIPA Gateway accepted values:				
			PASSPORT				
customerDocumentType			NATIONAL_ID				
			DRIVING_LICENSE				
			UNIQUE_TAXPAYER_REFERENCE				
			• OTHER				
customerDocumentNumber	String (30)	С	Customer document number				
			Condition: Mandatory if customerDocumentType provided				
			For EVOUS Sales Channel Merchants, the alpha-2 code for the State that issued the Driver's Licence.				
			Condition : Mandatory if merchant Sales Channel is 'EVOUS' and customerDocumentType = 'DRIVING_LICENSE'				
			and if country =				
customerDocumentState	String (2)	С	• 'US' alpha-2 code for the US State that issued the licence – see Section B.1				
			• 'CA' alpha-2 code for the Canadian State that issued the licence – see Section B.2				
			'MX' alpha-2 code for the Mexican State that issued the licence – see Section B.3				
			Else set to NULL				

Parameter	Data Type	Required	Description	
Payer Data The payer data is required by some regions and payment services, e.g. PayU Latam in Brazil, and so should only be completed if required by regulation. This data is not used to differentiate between the customer and someone else paying for the transaction. No checking or validation is performed by the BOIPA Gateway.				
payerFirstName	String (50)	N	Payer first name, if the Payee is different to the Customer Condition: Required by some regions and payment services, e.g. PayU Latam in Brazil	
payerLastName	String (100)	N	Payer last name, if the Payee is different to the Customer Condition: Required by some regions and payment services, e.g. PayU Latam in Brazil	
payerEmail	String (60)	N	Payer email, if the Payee is different to the Customer Condition : Required by some regions and payment services, e.g. PayU Latam in Brazil	
payerDateOfBirth	Date	N	Payer date of birth, if the Payee is different to the Customer Condition: Required by some regions and payment services, e.g. PayU Latam in Brazil	
payerPhone	String (100)	N	Payer phone, if the Payee is different to the Customer Condition : Required by some regions and payment services, e.g. PayU Latam in Brazil	
payerDocumentType	String (enum)	N	Type of document used to confirm the payer's identification, if the Payee is different to the Customer BOIPA Gateway accepted values: PASSPORT NATIONAL_ID DRIVING_LICENSE UTR OTHER Condition: Required by some regions and payment services, e.g. PayU Latam in Brazil	
payerDocumentNumber	String (30)	С	Payer document number, if the Payee is different to the Customer Conditions: Required by some regions and payment services, e.g. PayU Latam in Brazil Mandatory if payerDocumentType provided	
payerCustomerId	String (20)	С	Customer identifier of the payee in the merchant's system Conditions: Required by some regions and payment services, e.g. PayU Latam in Brazil Required if the payee is also a customer of the merchant	

Parameter	Data Type	Required	Description
	BOIPA Gateway to sup		transaction data to support Frictionless Flows in Strong Customer Authentication (SCA) and 3DS V2.x. his information is available. Although individual data elements are optional, as much available information
should be provided as is available.			
customerId	String (20)	N	Customer identifier in the merchant system, or the value generated by the BOIPA Gateway in a previous original payment transaction using the payment card or method. The value is used to validate that the payment card token is for the correct customer. If the customerId value is not the same held against the payment card token in the BOIPA Gateway database a Session Token Response – Not Processed (section 1.3) is returned. This must be the value supplied in or by the TOKENIZE API Operation. The value is used to validate that the payment card token is for the correct customer. • Mandatory for payment cards method • Optional for alternative payment methods • If the parameter is omitted or no value is provided for a first time use of the payment card, the BOIPA Gateway will generate a value, which will be stored internally against the payment method and returned in the Auth/Purchase/Verify Response – Processed (section 2.3)
payerCustomerId	String (20)	N	Customer identifier of the payee in the merchant's system Required by some regions and payment services, e.g. PayU Latam in Brazil, if the payee is also a customer of the merchant
merchantReference	String (200)	N	Merchant's supplementary information about customer Note: this information is only stored in the BOIPA Gateway, and not used in the payment process
customer Registration Date	Date	N	Customer registration date on merchant's site – format DD/MM/YYYY This parameter is optional, but it is recommended that it is provided if the information is available. Notes: 1. Used in the 3DS V2.x Authentication process as part of the customerAccountInfo 2. Used for reporting and in some risk tools where required

Parameter	Data Type	Required	Description
customerAccountInfo	JSON Object	N	Customer Account Information: Additional information about the Cardholder's account provided by the merchant. This parameter is optional, but it is recommended that it is provided if the information is available. Format: "customerAccountInfo": { "custAccAgeInd":"", "custAccChange":"", "custAccChange":"", "custAccPwChange!"."", "custAccPwChangeInd":"", "custPurchaseCount":"", "custProvisionAttemptsPerDay":"", "custTxnActivityDay":"", "custTxnActivityYear":"", "custPaymentAccAge":"", "custPaymentAccAge":"", "custShipAddressUsage!"", "custShipAddressUsage!"", "custShipAddressUsage!"", "custShipAddressUsage!"", "custSuspiciousAccActivity":"" } See below for the data elements' definitions. Note: Cardholder Account Information data elements used to define a time period can be included as either the specific date or an approximate indicator for when the action occurred. Merchants can use either parameter, e.g. use chAccAgeInd or chAccChange, using both is unnecessary. See Appendix C - customerAccountInfo Data Elements Definitions for the data elements' definitions.

			•		•	 	 •
Parameter	•	Data Type	Required	Description	n		

Customer Address Data

Customer address data are required for 3DSV2.x Authentication unless market or regional mandate restricts sending this information.

If address is included, at least one of customerAddressHouseName, customerAddressHouseNumber or customerAddressFlat should be provided.

The customerBillingAddress and customerShippingAddress parameters are marked as Not Require (N) to allow for merchant flexibility in their data encoding:

- 1. If customerBillingAddress data are omitted, the customerAddress data will be used for the customer billing address
- 2. If customerShippingAddress data are omitted, the customerAddress data will be used for the customer shipping address

Therefore:

- A. To use the customerAddress parameters as the customer's billing and shipping address, omit the customerBillingAddress and customerShippingAddress parameters
- B. To use the customerBillingAddress as the customer's shipping address, but different to the customerAddress values, complete the customerShippingAddress parameters with the same data
- C. To use the customerAddress parameters as the customer's billing address and have a different shipping address, omit the customerBillingAddress and complete the customerShippingAddress parameters
 - A. To use the *customerAddress* parameters as the customer's shipping address and have a different billing address, omit the *customerShippingAddress* and complete the *customerBillingAddress* parameters

			Customer correspondence address house name
customerAddressHouseName	String (50)	С	Condition : Required for 3DSV2.x unless market or regional mandate restricts sending this information.
	C1 : (E)	6	Customer correspondence address house number
customerAddressHouseNumber	String (5)	С	Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
a contains and address of late	Chain = (E)		Customer correspondence address flat
customerAddressFlat	String (5)	С	Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
			Customer correspondence address street
customerAddressStreet	String (EO)	С	The customer's street should be supplied whenever possible as it is used with the customerAddressPostalCode
customerAddressstreet	String (50)	C	value for AVS (Address Verification System) Checks, and so reduce the possibility of a payment decline
			Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
customorAddrossCity	String (50)	С	Customer correspondence address city
customerAddressCity	String (50)		Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
customer Address District	String (50)	N	Customer correspondence address district
customerAddressPostalCode	String (20)	g (30) C	Customer correspondence address postal code
CustomerAddressPostalCode	String (50)		Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
		С	Customer correspondence address country: The ISO alpha-2 code as defined in the ISO 3166 standard
customerAddressCountry	String (2)		Note: this will be used if country field is not supplied
			Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
customerAddressState	String (40)	С	Customer correspondence address state, county or province
customerAddressState	3ti iiig (40)	C	Condition: Required for 3DSV2.x unless market or regional mandate restricts sending this information.
customerAddressPhone	String (100)	N	Customer correspondence address phone
customerBillingAddressHouseName	String (50)	N	Customer billing address house name
customerBillingAddressHouseNumber	String (5)	N	Customer billing address house number
customerBillingAddressFlat	String (5)	N	Customer billing address flat

Parameter	Data Type	Required	Description
customerBillingAddressStreet	String (50)	N	Customer billing address street
customerBillingAddressCity	String (50)	N	Customer billing address city
customerBillingAddressDistrict	String (50)	N	Customer billing address district
customerBillingAddressPostalCode	String (30)	N	Customer billing address postal code
customerBillingAddressCountry	String (enum)	N	Customer billing address country
customer bining Address country	String (entitin)	IN	The ISO alpha-2 code as defined in the <u>ISO 3166 standard</u>
customerBillingAddressState	String (40)	N	Customer billing address state
customerBillingAddressPhone	String (100)	N	Customer billing address phone
customerShippingAddressHouseName	String (50)	N	Customer shipping address house name
customerShippingAddressHouseNumber	String (5)	N	Customer shipping address house number
customerShippingAddressFlat	String (5)	N	Customer shipping address flat
customerShippingAddressStreet	String (50)	N	Customer shipping address street
customerShippingAddressCity	String (50)	N	Customer shipping address city
customerShippingAddressDistrict	String (50)	N	Customer shipping address district
customerShippingAddressPostalCode	String (30)	N	Customer shipping address postal code
customor Shipping Address Country	String (onum)	N	Customer shipping address country
customerShippingAddressCountry	String (enum)	N	The ISO alpha-2 code as defined in the ISO 3166 standard
customerShippingAddressState	String (40)	N	Customer shipping address state, county or province
customerShippingAddressPhone	String (100)	N	Customer shipping address phone

		•	TASE/VERIFY (HOSTER Payment Page integration)
Parameter	Data Type	Required	Description
Additional Authentication Data			
The Additional Authentication Data has bee	n introduced by th	ne Secure Cu	stomer Authentication (SCA) and 3DS V2.x processes to combat fraud and increase electronic payment security
for customers.			
		_	hly recommended to provide as much information as possible. This will enable card issuers to provide more
Frictionless Flows in the Authentication pro	cesses, where the	cardholder i	ŭ ŭ
			Merchant Authentication Information: Information about how the merchant authenticated the cardholder
			before or during the transaction.
			This parameter is optional, but it is recommended that it is provided if the information is available.
			Also, although the individual data elements are optional, as much available information should be provided
			as is available.
merchantAuthInfo	JSON Object	N	Format:
merchantauthino	Joon Object		"merchantAuthInfo" : {
			"merchantAuthData":" ",
			"merchantAuthMethod":" ",
			"merchantAuthTimestamp":" "
			}
			See Appendix D - merchantAuthInfo Data Elements Definitions for the data elements' definitions.
			Merchant Prior Transaction Authentication Information: Information about how the merchant authenticated
			the cardholder as part of a previous 3DS transaction.
			This parameter is optional, but it is recommended that it is provided if the information is available.
			Also, although the individual data elements are optional, as much available information should be provided
			as is available.
			Format:
merchantPriorAuthInfo	JSON Object	N	"merchantPriorAuthInfo" : {
merchantrhorAuthino	J30N Object	IN .	"merchantPriorAuthData":" ",
			"merchantPriorAuthMethod":" ",
			"merchantPriorAuthTimestamp":" ",
			"merchantPriorRef":" "
			}
			If any data element is not provided, this object will not be included in the Authentication Request
			See Appendix E - merchantPriorAuthInfo Data Elements Definitions for the data elements' definitions.

Parameter I	Data Type	Required	Description
merchantRiskIndicator	JSON Object	N	Merchant Risk Indicator: Merchant's assessment of the level of fraud risk for the specific authentication for both the cardholder and the authentication being conducted. This parameter is optional, but it is recommended that it is provided if this information is available. Also, although the individual data elements are optional, as much available information should be provided as is available. Format: "merchantRiskIndicator": { "deliveryEmailAddress": " ", "deliveryTimeframe": " ", "giftCardAmount": " ", "giftCardCount": " ", "preOrderDate": " ", "preOrderPurchaseInd": " ", "reorderItemsInd": " ", "shipIndicator": " ", See Appendix F - merchantRiskIndicator Data Elements Definitions for the data elements' definitions.

Parameter	Data Type	Required	Description

Card On File Transactions Required Parameters

Transactions that are initiated by stored payment card credentials, stored either by the merchant or in the BOIPA Gateway, must be identified in the payment process through to the Card Issuers and Card Schemes. By their nature, these transactions, where the cardholder is not present at the point of initiation, will not have card or cardholder authentication data accompanying the transaction. To enable the Schemes and Issuers to assess risk and determine potential fraud accurately, new indicators and processes have been introduced to provide greater clarity into transactions using stored credentials.

The following 'cardOnFile' prefixed parameters are provided to comply with these requirements. These parameters must be provided for:

- Recurring Payments Plans transactions these are Plans managed by the merchant, either initiated using this API or the BOIPA Gateway's Hosted Payment Page
- Stored Credential Payments these are where the cardholder has consented to the merchant storing the card details (except the CVV/CSC), which will be presented back to the cardholder in future payments, so that the customer does not have to re-enter the payment card information

The field rules are:

- For the initial transaction:
 - cardOnFileType is set to 'First' only
 - o cardOnFileInitiator and cardOnFileInitialTransactionId parameters are omitted

Note: if the cardOnFileInitiator and cardOnFileInitialTransactionId parameters are included they will be ignored by the BOIPA Gateway

- Subsequent (recurring) payment requests must have the following values:
 - cardOnFileType is set to 'Repeat'
 - o cardOnFileInitiator is set to
 - 'Merchant' for Recurring Payments
 - 'Cardholder' for OneClick

cardOnFileInitialTransactionId is set to the merchantTxId value returned in the Auth/Purchase/Verify Response – Processed (section 2.3) of the initial transaction

cardOnFileType	String (10)	С	Indicates if the transaction is the first in a series of COF transactions or a transaction from already stored credentials Conditions: Mandatory if the payment originates from stored payment card credentials, i.e. the cardholder or merchant user did not input the card data during the transaction process, e.g. OneClick or pre-populated payment pages from stored card data Permitted Values "First": If the transaction is starting a series of COF transactions "Repeat": If the transaction is a subsequent transaction
cardOnFileReason	String (1)	С	Indicates the type of series of COF transactions Condition: Mandatory if cardOnFileType = "First" or "Repeat" Values:

Parameter	Data Type	Required	Description
cardOnFileMaxPayments	Integer (3)	С	Indicates the maximum number of authorisations permitted for instalment payments, where cardOnFileReason = 'I'. Must be greater than 1. Condition: Mandatory if the Merchant and Cardholder have agreed to instalment payments, i.e. cardOnFileReason = 'I'

Danamatan	Data Tura	D = accident	Danamination
Parameter	Data Type	Required	Description

Merchant Managed Recurring Payment Plan Required Parameters

The following fields prefixed with "mmrp" are provided for the merchant to be able to send transaction data from Merchant Managed Recurring Payment Plans. These data are required by the Acquirer, Issuers and Card Schemes to recognise that a Recurring Payment Plan is being created and to accept subsequent transactions in a plan as being related to the initiating transaction.

A Recurring Payment transaction is a transaction for which a cardholder provides written permission to a merchant to periodically charge his/her account number for recurring goods or services. These may include payment of charges such as insurance premiums, subscriptions, membership fees, tuition or utility charges. The recurring transaction indicator must be present in the authorization/initial purchase/sale. Address verification must be obtained with the initial transaction and is not required in the subsequent recurring transactions that contain the recurring indicator. Address verification is required to be obtained yearly.

Notes:

- 1. The data values must be as stated in the Description
- 2. The data must be accompanied with the "cardOnFile" prefixed data above

The data are not required if the merchant is setting up an BOIPA Gateway Managed Recurring Payment Plan in the BOIPA Gateway (see the "rp" prefixed fields below)

mmrpBillPayment	String (10)	N	For the initial and subsequent transactions must be set to "Recurring"
mmrnCustomorDrosont	nrpCustomerPresent String (12)		For the initial and subsequent transactions must be set to "BillPayment"
minipcustomerPresent			Condition: required if mmrpBillPayment = "Recurring"
			Date after which no further recurring payments authorisations shall be performed, i.e. the expected date of
mmrpRecurringExpiry	Date	С	the final payment of the Recurring Payments Plan.
min precedifing Expiry	Date		Format: YYYYMMDD
			Condition: required if mmrpBillPayment = "Recurring"
			The minimum number of days between Plan payments.
			Examples:
mmrpRecurringFrequency	Integer (4)	С	Daily Plans: 1
mmprecuring requercy	micger (4)		Weekly Plans: 7
			Monthly Plans 28
			Condition: required if mmrpBillPayment = "Recurring"
	String (50)	С	Contract number is managed by the merchant and must be unique for each contractual agreement between
mmrpContractNumber			the merchant and cardholder. Required for the initial and subsequent transactions
			Conditions: Required if mmrpBillPayment = "Recurring"
			Required for Banamex (EVO MX) merchants only
			For the initial and subsequent transactions must be set to "NotExistingDebt"
mmrpExistingDebt	String (15)	С	Conditions: required if mmrpBillPayment = "Recurring"
			Required for Banamex (EVO MX) merchants only
			For the initial and subsequent transactions must be set to "1"
mmrpCurrentInstallmentNumber	Number (1)	С	Condition: required if mmrpBillPayment = "Recurring"
			Required for Banamex (EVO MX) merchants only
			The merchant's reference for the transaction. This will generally be the same as the <i>merchantTxId</i> above, if
mmrpOrderNumber	String (50)	С	provided, but can be another unique reference for the merchant's own reconciliation.
p =			Condition: required if mmrpBillPayment = "Recurring"
			Required for Banamex (EVO MX) merchants only

Parameter	Data Type	Required	Description
mmrpOriginalMerchantTransactionId	String (50)	С	For the initial and subsequent transactions must be set to the <i>merchantTxld</i> parameter value Condition: required if mmrpBillPayment = "Recurring"

BOIPA Gateway Recurring Payment Plan Setup Required Parameters

The following fields prefixed with "rp" are provided for the merchant to be able to set up an BOIPA Gateway Managed Recurring Payment Plan with their customer in the BOIPA Gateway. The data must only be sent with the Request for the payment/verification that will initiate the Recurring Payment Plan series of payments. All subsequent payment requests will be generated by the BOIPA Gateway. The transaction results will be returned to the merchant in a Transaction Result call when complete. The BOIPA Gateway Managed Recurring Payment Plans created by this process can be seen and managed in the BOIPA Gateway Back-Office/Virtual Terminal Recurring Payments menu option.

Notes:

- 1. If the parameters are completed, the 'cardOnFileType' parameter must be set to "First". If not, an error will be returned stating that the parameter is missing.
- 2. If the merchant has not been configured for Recurring Payments in the BOIPA Gateway and data is present where *rpPlanType* > 0, an error will be returned stating that the merchant is not authorised for Recurring Payments and the payment will not be processed.

Errors will be returned in the Session Token Response – Not Processed (section 1.3)

Therefore, for merchants that have not been configured for Recurring Payment Plans all these fields must be omitted or empty (rpPlanType can be set to '0').

rpPlanType	Number (1)	С	Defines the type of Recurring Payment to be created Condition: Only required in the initial transaction to create the recurring payment plan in the BOIPA Gateway Permitted Values: 0 or missing = None (all Recurring Payments fields must be empty/will be ignored) 1 = Subscription 2 = Direct Debit 3 = Repayment 4 = Pay Per Use
rpPlanName	String (200)	С	The name of the Recurring Payments Plan given by the merchant Condition: Required if rpPlanType > 0 Permitted Values: free text for the merchant's easy reference in the BOIPA Gateway Back-Office/Virtual Terminal

Parameter		-	Description
rpFrequency	Data Type Number (2)	Required	Description Indicates how often payments are taken. Condition: Required if rpPlanType > 0 Permitted Values: The value is dependent on the rpPlanType value: If rpPlanType = 4 must be 0 Ad hoc or not known Else one of the following 20 Daily 23 Every 3 Days 1 Weekly 22 Every 2 Weeks 2 Monthly 3 Every 3 Months / Quarterly
rpNoOfPayments	Number (3)	С	4 Every 6 Months 5 Yearly The total number of payments to be taken Condition: Required if rpPlanType > 0 Permitted Values: The value is dependent on the rpPlanType value: 1 can be 0 or > 1 2 can be 0 or > 1 3 must be > 1 4 must be 0 If the plan is open-ended then rpNoOfPayments must be 0 If the plan is fixed term, then rpNoOfPayments must be > 1 (the first payment counts as 1)
rpDueDay	Number (2)	С	Defines the date on which the payment is due. This value is used to calculate the next payment due date after a payment is taken. Only for the second payment after the initial payment, this can be overridden by rpNextPaymentDate, but the third and subsequent payments will be calculated from the rpFrequency and rpDueDay values provided. Note: these can be changed in the Back-Office/Virtual terminal Recurring Payments Plan menu option. Condition: Required if rpPlanType > 0 Permitted Values: The value is dependent on the rpFrequency value: If rpFrequency = 0, 20 or 23 0 If rpFrequency = 1 or 22 >= 1 and <= 7 the day of the week (where Monday = 1) If rpFrequency = 2, 3, 4 or 5 >= 1 and <= 28 the day of the month, or the last day of the month

Parameter	Data Type	Required	Description	
rpNextPaymentDate	Date	С	Used to force a specific date when the second payment of the Recurring Payment Plan must be taken. Condition: Can be provided if rpPlanType > 0 If not provided the next rpNextPaymentDate will be calculated from the rpFrequency and rpDueDay Permitted Values: a date in the format DD/MM/YYYY	
rpAmount	BigDecimal (15.2 or 15.3)	С	The amount to be recovered from the payment card for each subsequent Recurring Payment. This can be different from the initial payment provided in the <i>amount</i> field above. Condition: Required if rpPlanType > 0 Permitted Values: The value is dependent on the rpPlanType value: 1 > 0.00 2 can be 0.00 or greater 3 > 0.00 4 can be 0.00 or greater If rpAmount = 0.00, the merchant will provide the values to the BOIPA Gateway in text files supplied to the SFTP folder	
rpFinalAmount	BigDecimal (15.2 or 15.3)	С	The final amount to be recovered from the payment card when a fixed term AUTH/PURCHASE/VERIFY (Hosted Payment Page Integration) Plan ends. Condition: Required if rpPlanType > 0 Permitted Values: The value is dependent on the rpPlanType value: 1 must be 0.00 2 must be 0.00 3 must be > 0.00 can be the same as rpAmount 4 must be 0.00	
rpContractNumber	String (50)	С	The unique Contract Number between the merchant and cardholder for the Recurring Payment Plan Condition: Required if <i>rpPlanType</i> is provided and merchant's sales channel is Banamex (EVO MX) Only used by merchants from the EVO MX Sales Channel	
rpReceiptEmail	String (100)	С	The email address to which receipts should be sent for all the subsequent recurring payments. A receipt will be sent for all results of those transactions, i.e. whether successful, declined or an error. Condition: if rpReceiptRequired = 1 this field must be completed	
rpCardUpdaterInterval	Integer	С	Denotes the time interval in days between successive processing of payment cards through the Card Updater Service. The maximum interval allowed by the Card Schemes is 6 months, 180 days. Condition: Can be provided if rpPlanType > 0 This is a value that is applied to the Recurring Payments Plan and will override the default value configured for the merchant in the BOIPA Gateway. The field allows the merchant to change the time interval for selected Recurring Payment Plans. Permitted Values: Must be an integer <=180	

1.2 Session Token Response - Processed

1.2.1 Format

JSON

1.2.2 Definition

Parameter	Data Type	Description	
result	String (40)	Will always be "success"	
merchantId	Integer (18)	The merchantld value received in the Session Token Request (section 1.1)	
		The Session Token that is a one-time use, hexadecimal string	
token String (40)	String (40)	The Token that must only be used for the Load Payment Form Request (section 2.1)	
	Session tokens are valid for 3600 second (1 hour) after which they expire		
	Any requests with expired session tokens will be rejected		
resultId	String (40)	Hexadecimal string that is to be used in any support request calls	
processingTime	Integer (6)	The time in seconds for the process to complete	
additionalDetails	Array	Not used – will always be "{}" or not included	

1.3 Session Token Response - Not Processed

1.3.1 Format

JSON

1.3.2 Definition

Parameter	Data Type	Description
result	String (40)	Will always be "failure"
errors	String Array	List of issues
resultId	String (40)	Hexadecimal string that is to be used in any support request calls
processingTime	Integer (6)	The time in seconds for the process to complete
additionalDetails	Array	Not used – will always be "{}" or not included

2 AUTH/PURCHASE/VERIFY API Operation

The Payment Form is a PCI Compliant Payment Form provided by the BOIPA Gateway.

The Payment Form is loaded to the merchant's website using the *integrationMode* parameter. The cardholder will enter the payment card details in to the Payment Form at the point of sale.

The Payment Form can be customised to match the merchant's payment screen – see Section 3 - Payment Form Branding & Localisation.

2.1 Load Payment Form Request

2.1.1 Format

POST Request to Action Request URL (see Section 3 of the BOIPA Gateway – 0 – Overview document)

2.1.2 Definition

Parameter	Data Type	Mandatory	Description
merchantId	Integer (18)	Y	The identifier for the merchant in the BOIPA Gateway provided at on-boarding This must be the same as that sent in the Session Token Request (section 1.1)
token	String (40)	Y	Session Token received in the Session Token Response - Processed (section 1.2)
containerId	String	С	The ID of the HTML element on the merchant's webpage in which to wrap the Payment Form - required for JavaScript based integration
successCallback	String	С	The JavaScript function name to be called in the event of a successful transaction
failureCallback	String	С	The JavaScript function name to be called in the event of a failed or declined transaction
cancelCallback	String	С	The JavaScript function name to be called in the event of a user cancelled transaction
bannerUrl	String	N	The merchant's URL of a resource (html page, image) to replace the default footer in the Hosted Payment Page with a logo
integrationMode	String (enum)	С	The method that the merchant's webpage will use to load the Hosted Payment Page, accepted values: Inject Iframe Standalone HostPaymentPage (only for use by EVO PL)

2.2 3DS V1.0 Redirection Response

The 3DS V1.0 Redirection Response is used by the merchant's system to open the 3DS challenge window in the customer's browser, for the customer to enter their security information to confirm their identity.

The 3DS V1.0 Redirection Response is sent if:

- forceSecurePayment parameter = True, in the Session Token Request (section 1.1), or
- the 3D Secure routing rules held in the BOIPA Gateway for the merchant require that card payment transactions are subject to 3DS Version 1.0

2.2.1 Format

JSON

2.2.2 Definition

Parameter/Label	Data Type	Description	
result	String (enum)	Will always be "redirection"	
merchantId	Integer (18)	The merchantId value received in the Session Token Request (section 1.1)	
merchantTxId String (5	String (EO)	The merchant's reference for the transaction provided in the Session Token Request	
	String (50)	(section 1.1) or that generated by the BOIPA Gateway	
txId	Integer (18)	The unique identifier for the transaction in the BOIPA Gateway	
redirectionUrl S	String (URL)	The URL to which the customer's browser must be redirected after the 3D Secure	
		processing is completed	

2.3 Auth/Purchase/Verify Response - Processed

2.3.1 Format

JSON

2.3.2 Definition

Parameter	Data Type	Description	
result	String (40)	Will always be "success"	
merchantId	Integer (18)	The merchantId value received in the Session Token Request (section 1.1)	
merchantTxId	String (50)	The merchant's reference for the transaction provided in the Session Token Request (section 1.1) or that generated by the BOIPA Gateway	
txld	Integer (18)	The unique identifier for the transaction in the BOIPA Gateway	
acquirerTxId	String (100)	The transaction identifier in acquirer system, if returned	
amount	BigDecimal (15.2 or 15.3)	The transaction amount, including tax, shipping, surcharge and discount amounts, provided in the Session Token Request (section 1.1)	
currency	String (enum)	The transaction ISO alpha-3 currency code as defined in the <u>ISO 4217 standard</u> , provided in the Session Token Request (section 1.1)	
customerId	String (20)	The customer identifier provided in the Session Token Request (section 1.1), or that generated by the BOIPA Gateway	
action	String (enum)	Action executed as provided in the Session Token Request (section 1.1) ("AUTH", "PURCHASE" or "VERIFY")	
pan	String (100)	The customer account value/number used in the transaction If a payment card was used this will be the specinCreditCardToken value provided in the Session Token Request (section 1.1)	
brandId	Integer (18)	The <i>brandId</i> value received in Session Token Response, or the default value used by the BOIPA Gateway, if not provided	
paymentSolutionId	Integer (18)	The paymentSolutionId value received in the Session Token Request (section 1.1)	
freeText	String (200)	A free text field for use by the merchant that is returned in the Transaction Result Call (see BOIPA Gateway - 6 - TRANSACTION RESULT CALL), used if not supplied in the Session Token Request (section 1.1)	
language	String (enum)	{not used for Direct API merchant}	
acquirerAmount	BigDecimal	Amount processed by payment acquirer.	
acquirerAmount	(15.2 or 15.3)	May be different than the <i>amount</i> in the Session Token Request (section 1.1)	
acquirerCurrency	String (enum)	The ISO alpha-3 currency code, as defined in the ISO 4217 standard, of the currency processed by the payment acquirer, which maybe different to the <i>currency</i> in the Session Token Request (section 1.1)	
paymentSolutionDetails	JSON block	For payment cards only: The Transaction Authorisation Code received from the acquirer, format: { "authCode":"",	
rpld	Integer (18)	Note: the maskedPan value format is "999999******9999" The identifier for the BOIPA Gateway Managed Recurring Payment Plan that was requested in the Session Token Request (section 6.4) through the 'rp' prefixed parameters If no Plan was requested this field will be empty If there was an error setting up the Plan the errors will be detailed in the errors field	

Parameter	Data Type	Description		
		The status of the transaction	n in the BOIPA Gateway:	
		Status	Condition	
		NOT_SET_FOR_CAPTURE	If "AUTH" successful	
status	String (enum)	SET_FOR_CAPTURE	If "PURCHASE" successful	
		VERIFIED	If "VERIFY" successful	
		DECLINED	If "AUTH" or "PURCHASE" was declined/refused	
		ERROR	If an error was returned by the payment process	
errors	String (400)	Any errors that occurred du	ring the successful processing of a transaction	
customParameter1Or	String (50)	The original 20x (50 characte	er) free text fields provided by the merchant in the	
customParameter20Or		Session Token Request (sect	ion 1.1)	
customParameter1	String (50)	20 x (50 character) free text	fields provided by the merchant in the Session	
customParameter20		Token Request (section 1.1),	, with non-Basic Latin characters replaced by a space	
		character. These values will	have been sent for payment processing.	

2.4 Auth/Purchase/Verify Response - Not Processed

2.4.1 Format

JSON

2.4.1 Definition

Parameter	Data Type	Description
result	String (40)	Will always be "failure"
errors	String Array	List of issues
resultId	String (40)	Hexadecimal string that is to be used in any support request calls
processingTime	Integer (6)	The time in seconds for the process to complete
additionalDetails	Array	Not used – will always be "{}" or not included
errors	String Array	List of errors
customParameter1Or	String (50)	The original 20x (50 character) free text fields provided by the merchant in the
customParameter20Or		Session Token Request (section 1.1)
customParameter1	String (50)	20 x (50 character) free text fields provided by the merchant in the Session
customParameter20		Token Request (section 1.1), with non-Basic Latin characters replaced by a space
		character. These values will have been sent for payment processing.

3 Payment Form Branding & Localisation

3.1 Styles & Branding

However, the Hosted Payment Form is loaded, it is possible to customise the Hosted Payment Form to match the design and branding of the merchant's webpage.

The merchant must provide the BOIPA Gateway with the CSS and image files. Sample files can be supplied on request.

The customised CSS file must be delivered to the BOIPA Gateway Support Team for review and sign off to ensure code integrity and security. The files will be loaded to the merchant's configuration in the BOIPA Gateway.

3.2 Localisation

Merchants will present different languages on their website. The Hosted Payment Page should reflect the language being viewed by the customer.

The language used in the Hosted Payment Form is determined by the value provided in the language parameter in the Session Token Request (section 1.1).

If the BOIPA Gateway does not support the requested language the default will be Spanish. However, to ensure the language is supported, the merchant should contact BOIPA Gateway Support Team to have the language added to the BOIPA Gateway suite.

Appendix A UAT Trigger Values

When integrating with the BOIPA Gateway in the User Acceptance Testing (UAT) environment, certain *amount* values in the Session Token Request (section 1.1) can be used to elicit status and error messages. This facility is provided to merchants so that testing can be confirmed against these expected errors.

Amount	Status	Error Message
0.00	SUCCESS	{none}
0.01	SUCCESS	{none}
0.02	SUCCESS	{none}
0.03	ERROR	Refer to card issuer
0.04	ERROR	Refer to card issuer, special condition
0.05	ERROR	Invalid merchant
0.06	SUCCESS	{none}
0.07	ERROR	Pick-up card
0.08	ERROR	Do not honor
0.09	ERROR	Error
0.10	ERROR	Pick-up card, special condition
0.11	ERROR	Invalid transaction
0.12	ERROR	Invalid amount
0.13	ERROR	Invalid card number
0.14	ERROR	No such issuer
0.15	ERROR	Re-enter transaction
0.16	ERROR	Not sufficient funds
0.17	ERROR	Unable to locate record
0.18	ERROR	Format error
0.19	ERROR	Bank not supported
0.20	ERROR	Expired card, pick-up
0.21	ERROR	Suspected fraud, pick-up
0.22	ERROR	Contact acquirer, pick-up
0.23	ERROR	Restricted card, pick-up
0.24	ERROR	Call acquirer security, pick-up
0.25	ERROR	PIN tries exceeded, pick-up
0.26	ERROR	No savings account
0.27	ERROR	No card record
0.28	ERROR	Lost card, pick-up
0.29	ERROR	Stolen card, pick-up
0.30	ERROR	Contact acquirer
0.31	ERROR	Exceeds withdrawal limit
0.32	ERROR	Original amount incorrect
0.33	ERROR	Expired card
0.34	SUCCESS	{none}
0.35	ERROR	Incorrect PIN
0.36	ERROR	Transaction not permitted to cardholder
0.37	ERROR	Transaction not permitted on terminal
0.38	ERROR	Suspected fraud
0.39	ERROR	Restricted card
0.40	ERROR	Exceeds withdrawal frequency
0.41	ERROR	Call acquirer security
0.41	ERROR	PIN tries exceeded
0.42	ERROR	Hard capture
0.44	ERROR	Cut-off in progress
0.45	ERROR	Issuer or switch inoperative
		•
0.46 0.47	ERROR	Duplicate transaction
	ERROR	System malfunction Wrong PIN, allowable number of PIN tries exceeded
0.48	ERROR	
0.49	ERROR	Time out
0.50	ERROR	Cryptographic failure

Amount	Status	URCHASE/VERIFY (Hosted Payment Page Integration) Error Message
0.51	ERROR	Routing error
0.52	ERROR	Exceeds cash limit
0.53	ERROR	TVR check failure
0.54	ERROR	TVR configuration error
0.55	ERROR	Unacceptable PIN
0.56	ERROR	Cashback service not available
0.57	ERROR	Cash request exceeds Issuer limit
0.58	SUCCESS	{none}
0.59	SUCCESS	{none}
0.60	SUCCESS	{none}
0.61	SUCCESS	{none}
0.62	SUCCESS	{none}
0.63	SUCCESS	{none}
0.64	SUCCESS	{none}
0.65	SUCCESS	{none}
0.66	SUCCESS	{none}
0.67	SUCCESS	{none}
0.68	SUCCESS	{none}
0.69	SUCCESS	{none}
0.70	SUCCESS	{none}
0.71	SUCCESS	{none}
0.72	SUCCESS	{none}
0.73	SUCCESS	{none}
0.74	SUCCESS	{none}
0.75	SUCCESS	{none}
0.76	SUCCESS	{none}
0.77	SUCCESS	{none}
0.78	SUCCESS	{none}
0.79	SUCCESS	{none}
0.80	SUCCESS	{none}
0.81	SUCCESS	{none}
0.82	SUCCESS	{none}
0.83	SUCCESS	{none}
0.84	SUCCESS	{none}
0.85	SUCCESS	{none}
0.86	SUCCESS	{none}
0.87	SUCCESS	{none}
0.88	SUCCESS	{none}
0.89	SUCCESS	{none}
0.90	SUCCESS	{none}
0.91	SUCCESS	{none}
0.92	SUCCESS	{none}
0.93	ERROR	ERROR
0.94	ERROR	ERROR
0.95	ERROR	Communication Error
0.96	SUCCESS	{none}
0.97	SUCCESS	{none}
0.98	SUCCESS	{none}
0.99	SUCCESS	{none}
0.99	2000532	्राजार}

Appendix B Country States

The following table shows the codes for the US, Canadian and Mexican States used in the *customerDocumentState* parameter of the Session Token Request (section 1.1).

B.1 United States

State	Abbr	State	Abbr	Territories	Abbr
Alabama	AL	Montana	MT	American Samoa	AS
Alaska	AK	Nebraska	NE	Guam	GU
Arizona	AZ	Nevada	NV	Norther Mariana Islands	MP
Arkansas	AR	New Hampshire	NH	Puerto Rico	PR
California	CA	New Jersey	NJ	U.S. Virgin Islands	VI
Colorado	CO	New Mexico	NM		
Connecticut	CT	New York	NY		
Delaware	DE	North Carolina	NC		
District of Columbia	DC	North Dakota	ND		
Florida	FL	Ohio	ОН		
Georgia	GA	Oklahoma	OK		
Hawaii	HI	Oregon	OR		
Idaho	ID	Pennsylvania	PA		
Illinois	IL	Rhode Island	RI		
Indiana	IN	South Carolina	SC		
Iowa	IA	South Dakota	SD		
Kansas	KS	Tennessee	TN		
Kentucky	KY	Texas	TX		
Louisiana	LA	Utah	UT		
Maine	ME	Vermont	VT		
Maryland	MD	Virginia	VA		
Massachusetts	MA	Washington	WA		
Michigan	MI	West Virginia	WV		
Minnesota	MN	Wisconsin	WI		
Mississippi	MS	Wyoming	WY		
Missouri	MO				

B.2 Canada

State	Abbr
Alberta	AB
British Columbia	ВС
Manitoba	MB
New Brunswick	NB
Newfoundland and Labrador	NL
Northwest Territories	NT
Nova Scotia	NS
Nunavut	NU
Ontario	ON
Prince Edward Island	PE
Quebec	QC
Saskatchewan	SK
Yukon	YT

B.3 Mexico

State	Abbr
Aguascalientes	AG
Baja California	BJ
Baja California Sur	BS
Campeche	СР
Chiapas	CH
Chihuahua	CI
Coahuila	CU
Colima	CL
Distrito Federal	DF
Durango	DG
Guanajuato	GJ
Guerrero	GR
Hidalgo	HG
Jalisco	JA
Mexico	EM
Michoacán	МН
Morelos	MR
Nayarit	NA
Nuevo Leon	NL
Oaxaca	OA
Puebla	PU
Queretaro	QA
Quintana Roo	QR
San Luis Potosi	SL
Sinaloa	SI
Sonora	SO
Tabasco	TA
Tamaulipas	TM
Tlaxcala	TL
Veracruz	VZ
Yucatan	YC
Zacatecas	ZT

Appendix C customerAccountInfo Data Elements Definitions

All parameters are optional, but should be supplied if the data is available to facilitate a Frictionless Flow

Data Element	Data Type	Req	Description
custAccAgeInd	String (enum)	N	Cardholder Account Age Indicator: Length of time that the cardholder has had the account with the merchant. Values accepted: 01 = No account (guest check-out) 02 = Created during this transaction 03 = Less than 30 days 04 = 30-60 days 05 = More than 60 days
custAccChange	String (8)	N	Cardholder Account Change: Date that the cardholder's account with the merchant was last changed, including Billing or Shipping address, new payment account, or new user(s) added. Date format = YYYYMMDD
custAccChangeInd	String (enum)	N	Cardholder Account Change Indicator: Length of time since the cardholder's account information with the merchant was last changed, including Billing or Shipping address, new payment account, or new user(s) added. Values accepted: 01 = Changed during this transaction 02 = Less than 30 days 03 = 30-60 days 04 = More than 60 days
custAccPwChange	String (8)	N	Cardholder Account Password Change: Date that cardholder's account with the merchant had a password change or account reset Date format = YYYYMMDD
custAccPwChangeInd	String (enum)	N	Indicates the length of time since the cardholder's account with the Merchant had a password change or account reset. Values accepted: 01 = No change 02 = Changed during this transaction 03 = Less than 30 days 04 = 30-60 days 05 = More than 60 days
custPurchaseCount	Integer (4)	N	Cardholder Account Purchase Count: Number of purchases with this cardholder account during the previous six months.
custProvisionAttemptsPerDay	Integer (3)	N	Number of Provisioning Attempts Per Day: Number of Add Card attempts in the last 24 hours.
custTxnActivityDay	Integer (3)	N	Number of Transactions Per Day: Number of transactions (successful and abandoned) for this cardholder account with the merchant across all payment accounts in the previous 24 hours.
custTxnActivityYear	Integer (3)	N	Number of Transactions Per Year: Number of transactions (successful and abandoned) for this cardholder account with the merchant across all payment accounts in the previous year.
custPaymentAccAge	Integer (8)	N	Payment Account Age: Date that the payment account was enrolled in the cardholder's account with the merchant. Date format = YYYYMMDD

Data Element	Data Type	Req	Description
		N	Payment Account Age Indicator: Indicates the length of time that the payment account was enrolled in the cardholder's
			account with the merchant.
			Values accepted:
custPaymentAccInd	String (enum)		01 = No account (guest check-out)
custraymentAccinu	String (enum)		02 = During this transaction
			03 = Less than 30 days
			04 = 30–60 days
			05 = More than 60 days
custShipAddressUsage	String (8)	N	Shipping Address Usage: Date when the shipping address used for this transaction was first used with the merchant.
custSiiipAddiessOsage	String (6)	IN	Date format = YYYYMMDD
			Shipping Address Usage Indicator: Indicates when the shipping address used for this transaction was first used with the
	String (enum)	N	merchant.
			Values accepted:
custShipAddressUsageInd			01 = This transaction
			02 = Less than 30 days
			03 = 30–60 days
			04 = More than 60 days
			Shipping Name Indicator: Indicates if the Cardholder Name on the account is identical to the shipping Name used for this
	String (enum)	N	transaction.
custShipNameIndicator			Values accepted:
			01 = Account Name identical to shipping Name
			02 = Account Name different than shipping Name
			Suspicious Account Activity: Indicates whether the merchant has experienced suspicious activity (including previous fraud)
custSuspiciousAccActivity	String (enum)	N	on the cardholder account.
			Values accepted:
			01 = No suspicious activity has been observed
			02 = Suspicious activity has been observed

Appendix D merchantAuthInfo Data Elements Definitions

All parameters are required if the merchantAuthInfo object is included, except merchantAuthData, which is undefined in 3DS V2.x (See Description).

Data Element	Data Type	Req	Description
merchantAuthData	String (20000)	N	Merchant Authentication Data: Data that documents and supports a specific authentication process. For example, if merchantAuthMethod = 03, this element can carry information about the provider of the federated ID and related information. 06, this element can carry the FIDO attestation data (including the signature). 07, this element can carry FIDO Attestation data with the FIDO assurance data signed. 08, this element can carry the SRC assurance data. In the current version of the 3DS V2.x specification, this data element is not defined in detail, and therefore is optional. However, the intention is that for each merchant Authentication Method, this field should carry data that the ACS can use to verify the authentication process.
merchantAuthMethod	String (enum)	Υ	Merchant Authentication Method: Mechanism used by the merchant to authenticate Cardholder. Values accepted: 01 = No merchant authentication occurred (i.e. cardholder "logged in" as guest) 02 = Login to the cardholder account in the merchant's system using merchant's own credentials 03 = Login to the cardholder account in the merchant's system using federated ID 04 = Login to the cardholder account in the merchant's system using issuer credentials 05 = Login to the cardholder account in the merchant's system using third-party authentication 06 = Login to the cardholder account in the merchant's system using FIDO Authenticator 07 = Login to the cardholder account in the merchant's system using FIDO Authenticator (FIDO assurance data signed) 08 = SRC Assurance Data Netcetera Constraint: Values '07' and '08' are only available when Netcetera initiates authentication with EMV 3DS 2.2.0 version or greater. In this instance, the threeDSPreferredProtocolVersion and enforcethreeDSPreferredProtocolVersion parameters should be set appropriately
merchantAuthTimestamp	String (12)	Υ	Merchant Authentication Timestamp: Date and time in UTC of the cardholder authentication. Date format = YYYYMMDDHHMM

Appendix E merchantPriorAuthInfo Data Elements Definitions

All parameters are required if the merchantPriorAuthInfo object is included, except merchantPriorAuthData, which is undefined in 3DS V2.x (See Description)

Data Element	Data Type	Req	Description
merchantPriorAuthData	String (2048)	N	Merchant Prior Transaction Authentication Data: Data that documents and supports a specific authentication process. In the current version of the specification this data element is not defined in detail, however the intention is that for each Merchant Authentication Method, this field carry data that the ACS can use to verify the authentication process. In future versions of the specification, these details are expected to be included.
merchantPriorAuthMethod	String (enum)	N	Merchant Prior Transaction Authentication Method: Mechanism used by the merchant to previously authenticate the Cardholder Values accepted: 01 = Frictionless authentication occurred 02 = Cardholder challenge occurred 03 = AVS verified 04 = Other Issuer methods
merchantPriorAuthTimestamp	String (12)	N	Merchant Prior Transaction Authentication Timestamp: Date and time in UTC of the prior cardholder authentication. Date format = YYYYMMDDHHMM
merchantPriorRef	String (36)	N	Merchant Prior Transaction Reference: This data element provides additional information to the Issuer to determine the best approach for handing a request. This data element contains the original <i>merchantTxId</i> for a prior authenticated transaction (for example, the first recurring transaction that was authenticated with the cardholder).

Appendix F merchantRiskIndicator Data Elements Definitions

All parameters are optional, but should be supplied if the data is available to facilitate a Frictionless Flow

Data Element	Data Type	Req	Description
deliveryTimeframe	String (enum)	N	Delivery Timeframe: Indicates the merchandise delivery timeframe. Values accepted: 01 = Electronic Delivery 02 = Same day shipping 03 = Overnight shipping 04 = Two-day or more shipping
giftCardAmount	BigDecimal (15.2 or 15.3)	N	Gift Card Amount: For prepaid or gift card purchase, the purchase amount total of prepaid or gift card(s)
giftCardCount	Integer (2)	N	Gift Card Count: For prepaid or gift card purchase, total count of individual prepaid or gift cards/codes purchased.
giftCardCurr	String (3)	N	Gift Card Currency: For prepaid or gift card purchase, the ISO alpha-3 code for the currency as defined in the ISO 4217 standard
preOrderDate	String (8)	N	Pre-Order Date: For a pre-ordered purchase, the expected date that the merchandise will be available. Date format = YYYYMMDD
preOrderPurchaseInd	String (enum)	N	Pre-Order Purchase Indicator: Indicates if the Cardholder is placing an order for merchandise with a future availability or release date. Values accepted: 01 = Merchandise available 02 = Future availability
reorderItemsInd	String (enum)	N	Reorder Items Indicator: Indicates whether the cardholder is reordering previously purchased merchandise. Values accepted: 01 = First time ordered 02 = Reordered
shipIndicator	String (enum)	N	Shipping Indicator: Indicates shipping method chosen for the transaction. Merchants must choose the Shipping Indicator code that most accurately describes the cardholder's specific transaction, not their general business. If one or more items are included in the sale, use the Shipping Indicator code for the physical goods, or if all digital goods, use the Shipping Indicator code that describes the most expensive item. Values accepted: 01 = Ship to cardholder's billing address 02 = Ship to another verified address on file with merchant 03 = Ship to address that is different than the cardholder's billing address 04 = "Ship to Store" / Pick-up at local store (Store address shall be populated in shipping address fields) 05 = Digital goods (includes online services, electronic gift cards and redemption codes) 06 = Travel and Event tickets, not shipped 07 = Other (for example, Gaming, digital services not shipped, emedia subscriptions, etc.)