

Auth/Purchase/Verify - Direct API

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Document Purpose

The purpose of this document is to describe the Auth/Purchase/Verify - Direct API API Operation to enable merchant developers to integrate their webpages with the IPG Gateway. Refer to the *IPG Gateway* -0 - *Overview* document for how this API Operation is used in the merchant processes.

The Auth/Purchase/Verify - Direct API API Operation allows the merchant using the Direct API Integration Method to send customer authorise and purchase payment card transactions, or payment card details for verification through the IPG Gateway.



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 *IPG Gateway – 0 – Overview* document)

1.1.2 Definition

Parameter	Data Type	Req	Description
merchantId	Integer (18)	Υ	The identifier for the merchant in the IPG Gateway provided at on-boarding
password	String (64)	Υ	The merchant's password in the IPG Gateway provided at on-boarding
action	String (enum)	Υ	Must be "AUTH", "PURCHASE" or "VERIFY" For EVO Mexico/Banamex eGlobal Installments Plans this must be "AUTH" or "PURCHASE"; plans cannot be initiated from a "VERIFY" operation For Recurring Payments this must be "PURCHASE" or "VERIFY", i.e. where rpPlanType > 0 "PURCHASE" can be used for any rpPlanType "VERIFY" can only be used for rpPlanType = 2 (Direct Debit) or 4 (Pay Per Use) In the case of free-trial period for Pay Per Use Plan Types, or deferred first payment for Direct Debits
timestamp	Integer (13)	Υ	Milliseconds since 1970-01-01 00:00:00
allowOriginUrl	String (253)	Υ	The merchant's URL that will make the Auth/Purchase/Verify Request (see Section 2.1) Cross-Origin Resource Sharing (CORS) headers will allow only this origin
quickSale	Boolean	N	A flag to indicate if a quick sale was performed where no customer information was taken. If set to TRUE: • A customerId will be generated by the IPG Gateway database • The customerAddressPostalCode and customerAddressCountry fields should be completed for the AVS checks on the payment card • The other 'customer' and 'payer' parameters should not be supplied and will be ignored • The customer name in the IPG Gateway database will be set to 'Quick Sale' – this will be the indicator in the Back-Office/Virtual Terminal transactions tables If set to FALSE or omitted, customer information should be supplied in the 'customer' and 'payer' prefixed parameters. A new customer record will be created in the IPG Gateway database using the customerId.



Parameter	Data Type	Req	Description Payment Acceptance
customerId	String (20)	С	Customer identifier in the merchant system, or the value generated by the IPG Gateway in the TOKENIZE API Operation (see IPG Gateway – 1 – TOKENIZE). 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. If the customerId value is not the same held against the payment card token in the IPG Gateway database a Session Token Response – Not Processed (section 1.3) is returned. • Mandatory for payment cards method • Must not be supplied if quickSale = TRUE • 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 IPG Gateway will generate a value, which will be stored internally against the payment card token and returned in the Auth/Purchase/Verify Response – Processed (section 2.3)
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, the IPG Gateway will always treat the transaction as a first-time transaction for the customer
merchantTxId	String (50)	N	The merchant's reference for the transaction If the parameter is empty or omitted, a transaction id will be generated by the IPG Gateway as a hexadecimal string, and returned in the 3DS Redirection Response (section 2.2) and Auth/Purchase/Verify Response – Processed (section 2.3)
merchantFreeText	String (200)	N	A free text field for the merchant to make comments about the transaction for their own reference. Note: This will appear in the IPG Gateway Back-Office/Virtual Terminal Transaction Detail screen
operatorId	String (20)	N	Identifier of the merchant's operator or agent on behalf of the end customer, if the operation is not performed by the merchant, and the merchant wants to track the operator who performed the transaction
brandId	Integer (18)	С	The IPG Gateway Brand Id for the merchant's goods or services supplied at on-boarding If not provided the merchant's default IPG Gateway Brand Id will be used Condition: Mandatory if the merchantLandingPageRedirectMethod is set to 'GET'
channel	String (enum)	Υ	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
userDevice	String (enum)	N	Type of device used, accepted values: • "MOBILE" • "DESKTOP" • "UNKNOWN" (default value if no value provided)
userAgent	String (1024)	С	The user agent of the browser from which the transaction was performed, for merchant tracking if required



Parameter	Data Type	Reg	Description Payment Acceptance
	7,1		The total transaction amount, including tax, shipping, surcharge and discount amounts
	BigDecimal		If action = "AUTH" or "PURCHASE", if a value is supplied this must be > 0.00
amount	(15.2 or 15.3)	N	If action = "VERIFY", this must be 0.00 or omitted
	, , , , , , , , , , , , , , , , , , , ,		See Appendix A - UAT Trigger Values
	BigDecimal		Tax amount as a currency value (not percentage)
taxAmount	(15.2 or 15.3)	N	If action = "VERIFY", this must be 0.00 or omitted
ala in a Amanus t	BigDecimal		Shipping amount
shippingAmount	(15.2 or 15.3)	N	If action = "VERIFY", this must be 0.00 or omitted
sharga Amaunt	BigDecimal	N	Surcharge amount
chargeAmount	(15.2 or 15.3)	IN	If action = "VERIFY", this must be 0.00 or omitted
discountAmount	BigDecimal	N	Discount amount
discountAmount	(15.2 or 15.3)	IN	If action = "VERIFY", this must be 0.00 or omitted
currency	String (enum)	Υ	The ISO alpha-3 code for the currency as defined in the <u>ISO 4217 standard</u>
country	String (enum)	Υ	The ISO alpha-2 code country in which the transaction takes place, as defined in the ISO 3166 standard
Country			If this is not known or unavailable, the <i>customerAddressCountry</i> will be used.
paymentSolutionId	Integer (18)	N	The IPG Gateway Payment Solution Identifier
paymentoolutioniu			See IPG Gateway – 7 – GET AVAILABLE PAYMENT SOLUTIONS for valid values
language	String (enum)	N	{not used by Direct API Integration merchants – used by the Hosted Payment Page integration to determine
lunguage	String (criain)	11	the language for the hosted payment page}
	String (50)	N	20x (50 character) free text fields for the merchant's general use
customParameter1Or customParameter20Or			Note : Only the Basic Latin character set should be used. Any other characters will be removed and replaced
			by a space character when sent for payment processing
s_text1, s_text2 s_text5	String (200)	N	5x (200 character) free text fields for general use
d_date1, d_date2 d_date5	Date/Time	N	5 Date fields for general use.
	<u> </u>		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"
n_num1, n_num2 n_num5	BigDecimal (7.2)	N	5 (7.2 decimal) numeric fields for general use – a dot "." must be used as a decimal separator, not the
11_11a1112, 11_11a1112 11_11a1113	DigDecimal (7.2)	IN	comma "," and a thousand separator must not be used
merchantNotificationUrl	String (200)	Υ	The merchant's server-to-server communications URL, to which the Transaction Result Call will be sent
			See IPG Gateway – 3 – TRANSACTION RESULT CALL document
merchantLandingPageUrl	String (200)	N	The URL to which the customer's browser is redirected for success or failure messaging



Parameter	Data Type	Req	Description Payment Acceptanc
merchantLandingPageRedirectMethod	String (enum)	N	Determines the method by which the customer is redirected to merchantLandingPage 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
customerDocumentType	String (enum)	N	Type of document used to confirm the customer's identification IPG Gateway accepted values: PASSPORT NATIONAL_ID DRIVING_LICENSE UNIQUE_TAXPAYER_REFERENCE OTHER
customerDocumentNumber	String (30)	С	Customer document number Condition: Mandatory if customerDocumentType provided
customerDocumentState	String (2)	С	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 = '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
merchantReference	String (200)	N	The merchant's reference for the customer
customerFirstName	String (50)	N	First name of the customer
customerLastName	String (100)	N	Last name, surname or family name of the customer
customerSex	String (enum)	N	Customer sex: M (male) F (female)
customerDateOfBirth	Date	N	Customer date of birth – format DD/MM/YYYY
customerRegistrationDate	Date	N	Customer registration date on merchant's site – format DD/MM/YYYY Note : this is used for reporting and in some risk tools where required
customerEmail	String (60)	N	Customer email address
customerPhone	String (100)	N	Customer phone number
customerIPAddress	String (39)	N	Customer IP address from where purchase is made. Only IPv4 supported



Parameter	Data Type	Req	Description
customerAddressHouseName	String (50)	N	Customer address house name
customerAddressHouseNumber	String (5)	N	Customer address house number
customerAddressFlat	String (5)	N	Customer address flat
			Customer address street
customerAddressStreet	String (50)	N	The customer's street should be supplied whenever possible as it is used with the
customerAddressStreet	3tillig (30)	l 'N	customerAddressPostalCode value for AVS (Address Verification System) Checks, and so reduce the
			possibility of a payment decline
customerAddressCity	String (50)	N	Customer address city
customer Address District	String (50)	N	Customer address district
			Customer address postal code
			Conditions:
customer Address Postal Code	String (30)	С	If quickSale = TRUE, customerAddressPostalCode is mandatory
customerAddressFostarcode	3tillig (30)		The customer's postal code (postcode/ZIP Code) should be supplied whenever possible as it is used
			with the customerAddressStreet value for AVS (Address Verification System) Checks, and so reduce
			the possibility of a payment decline
		N	Customer address country
customerAddressCountry	String (enum)		The ISO alpha-2 code as defined in the ISO 3166 standard
			Note: this will be used if <i>country</i> field is not supplied
customerAddressState	String (40)	N	Customer address state, county or province
customerAddressPhone	String (100)	N	Customer 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
customerShippingAddressCountry	String (enum)	N	Customer shipping address country
customershippingAddressCountry	String (entitin)	IN	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
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
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



Parameter	Data Type	Req	Description Payment Acceptance
avata wa a wBillia a A dalwa a a Cavuatuu	Chuin a (annuma)	N.	Customer billing address country
customerBillingAddressCountry	String (enum)	N	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
noverFirstNeme	Ctring (FO)	С	Payer first name, if the Payee is different to the Customer
payerFirstName	String (50)		Conditions: Required by some regions and payment services, e.g. PayU Latam in Brazil
noverlastNeme	String (100)	С	Payer last name, if the Payee is different to the Customer
payerLastName	3thing (100)	C	Conditions : Required by some regions and payment services, e.g. PayU Latam in Brazil
payerEmail	String (60)	С	Payer email, if the Payee is different to the Customer
payerEmail	String (00)	C	Conditions: Required by some regions and payment services, e.g. PayU Latam in Brazil
payerDateOfBirth	Date	С	Payer date of birth, if the Payee is different to the Customer
payer DateOfBiltil	Date		Conditions : Required by some regions and payment services, e.g. PayU Latam in Brazil
payerPhone	String (100)	С	Payer phone, if the Payee is different to the Customer
payerritorie	3ti iiig (100)	C	Conditions : Required by some regions and payment services, e.g. PayU Latam in Brazil
			Type of document used to confirm the payer's identification, if the Payee is different to the Customer
			IPG Gateway accepted values:
			• PASSPORT
payerDocumentType	String (enum)	С	NATIONAL_ID
payer bocument type	String (enum)		DRIVING_LICENSE
			• UTR
			OTHER
			Conditions : Required by some regions and payment services, e.g. PayU Latam in Brazil
			Payer document number, if the Payee is different to the Customer
payerDocumentNumber	String (30)	С	Conditions: Mandatory if payerDocumentType provided
			Required by some regions and payment services, e.g. PayU Latam in Brazil
			Customer identifier of the payee in the merchant's system
payerCustomerId	String (20)	С	Conditions : Required by some regions and payment services, e.g. PayU Latam in Brazil, if the payee is also a
			customer of the merchant
			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 IPG Gateway are used
forceSecurePayment	Boolean	С	If 3D Secure processing is required, the 3DS Redirection Response (section 2.2) is sent
			<u>Condition</u>
			• if cardOnFileType = "Repeat" the forceSecurePayment parameter must be omitted. If it is included
			with any value (true, false, or empty) the Session Token Response – Not Processed (section 1.3) will
			be returned showing the error



Parameter	Data Type	Req	Description Payment Acceptance
			Determines how "U" (Unknown) responses from the 3D Secure process are managed:
processUnknownSecurePayment	Boolean	N	If True and blockU is True: the transaction will be stopped in the IPG Gateway and
			a Session Token Response – Not Processed (section 1.3) is returned
			The payment card token received in the TOKENIZE API Operation, see <i>IPG Gateway – 1 – TOKENIZE</i>
specinCreditCardToken	String (100)	С	Conditions : For OneClick transactions this must be the <i>data.oneClickPaymentMethods.payToken</i> returned in
			the Get OneClick Payment Methods Response – Processed
			A flag that indicates whether the payment card transaction is to be processed with or without the Card
			Security Code (CSC also called Card Verification Data [CVD], Card Verification Number, Card Verification
specinProcessWithoutCvv2	Boolean	N	Value [CVV], Card Verification Value Code, Card Verification Code [CVC], Verification Code [V-code or V
			code], or Signature Panel Code [SPC])
			This requires prior authorization by the IPG Gateway and acquirer.
bankMid	String (50)	N	The merchant's Bank MID with the Acquirer.
Darikiviid	3timg (30)	11	Used by the merchant to control which acquirer bank MID will be used for the transaction.
	Boolean		Determines how the payment card data is stored in the IPG Gateway. Payment card data is always stored in
		N	the IPG Gateway for legislative and regulatory purposes.
storeCard			This flag determines if the card remains active for use in the IPG Gateway:
			If False the payment card is set to inactive
			If True or Missing the payment card is set to active
			Sets a minimum transaction value allowed to be processed in the IPG Gateway
limitMin	BigDecimal	N	This overrides the minimum value set in the IPG 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
			Sets a maximum transaction value allowed to be processed in the IPG Gateway
limitMax	BigDecimal (15.2 or 15.3)	N	This overrides the maximum value set in the IPG Gateway merchant configuration
			It is the merchant's responsibility to set a value that will be accepted by the Acquirer and Issuer involved in
			the transaction process
freeText	String (200)	N	A free text field for use by the merchant that is returned in the Transaction Result Call (see IPG Gateway - 6 -
			TRANSACTION RESULT CALL)



			Payment Acceptance
Parameter	Data Type	Req	Description

Card On File Transactions Required Parameters

Transactions that are initiated by stored payment card credentials, stored either by the merchant or in the IPG 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 IPG 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:
 - o 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 IPG 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			
cardOnFileInitiator	String (10)	С	 Indicates if the COF transaction is either a: Cardholder Initiated Transaction (CIT) where the cardholder actively selects the card to use, and completes the transaction using previously stored details. Merchant Initiated Transaction (MIT) where a merchant submits a transaction using previously stored detailed without the cardholder's participation. For example, a recurring payment. Conditions: Mandatory if cardOnFileType = "Repeat" A value is not required if cardOnFileType = "First" and will be ignored Permitted Values "Cardholder": If a Cardholder Initiated Transaction "Merchant": If a Merchant Initiated Transaction 			



Parameter	Data Type	Req	Description Payment Acceptance
cardOnFileInitialTransactionId	String (50)	С	The merchant's transaction identifier¹ for the transaction that started the COF series of payments, i.e. the transaction where cardOnFileType = "First"; the merchantTxld value sent in the original Session Token Request or returned in the Auth/Purchase/Verify Response – Processed Note: this must be the transaction identifier for the specific set of transactions. For example, if the customer has multiple recurring payments plans with the merchant, this value for the payment being request must be the initial payment for the plan Conditions: Mandatory if cardOnFileType = "Repeat" For OneClick transactions this must be the data.oneClickPaymentMethods.originalTransactionId returned in the Get OneClick Payment Methods Response – Processed A value is not required if cardOnFileType = "First" and will be ignored

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 IPG Gateway Managed Recurring Payment Plan in the IPG Gateway (see the "rp" prefixed fields below)

The data are not required if the merchant is setting up an iro dateway managed necurring rayment rian in the iro dateway (see the 17 prenied netus below)					
mmrpBillPayment	String (10)	N	For the initial and subsequent transactions must be set to "Recurring"		
mmrnCustomorDrosont	String (12)		For the initial and subsequent transactions must be set to "BillPayment"		
mmrpCustomerPresent	String (12)	J	Condition: required if mmrpBillPayment = "Recurring"		
			Contract number is managed by the merchant and must be unique for each contractual agreement between		
	String (50)	С	the merchant and cardholder.		
mmrpContractNumber			Required for the initial and subsequent transactions		
			Conditions: Required if mmrpBillPayment = "Recurring"		
			Required for Banamex (EVO MX) merchants only		
	String (15)	С	For the initial and subsequent transactions must be set to "NotExistingDebt"		
mmrpExistingDebt			Conditions: required if mmrpBillPayment = "Recurring"		
			Required for Banamex (EVO MX) merchants only		

¹ Note: this is used to match the constraint in the REFUND API Operation where the *originalMerchantTxId* is mandatory, whereas the *originalTxId* (the IPG Gateway transaction identifier) is non-mandatory. Therefore, it is more likely that the merchant would already have a method for their ID. See Section 1.1 of the *API Specification - 3 - REFUND*



Parameter	Data Type	Req	Description	
			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	
mmrnOriginalMarchantTransactionId	Chrima (FO))	For the initial and subsequent transactions must be set to the merchantTxId parameter value	
mmrpOriginalMerchantTransactionId String (50)		C	Condition: required if mmrpBillPayment = "Recurring"	

IPG 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 IPG Gateway Managed Recurring Payment Plan with their customer in the IPG 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 IPG Gateway. The transaction results will be returned to the merchant in a Transaction Result call when complete. The IPG Gateway Managed Recurring Payment Plans created by this process can be seen and managed in the IPG 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 IPG 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.
- 3. If quickSale = True and data is present where rpPlanType > 0, an error will be returned stating that a Recurring Payment Plan cannot be created from a Quick Sale.

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)	Y	Defines the type of Recurring Payment to be created Condition: Only required in the initial transaction to create the recurring payment plan in the IPG 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 IPG Gateway Back-Office/Virtual Terminal



Parameter	Data Type	Req	Description Payment Acceptance
	,		Indicates how often payments are taken.
			Condition: Required if rpPlanType > 0
			Permitted Values: The value is dependent on the <i>rpPlanType</i> value:
			If rpPlanType = 4 must be
			0 Ad hoc or not known
			Else one of the following
rpFrequency	Number (2)	С	20 Daily
ipriequency	Nulliber (2)		23 Every 3 Days
			1 Weekly
			22 Every 2 Weeks
			2 Monthly
			3 Every 3 Months / Quarterly
			4 Every 6 Months
			5 Yearly
			The total number of payments to be taken
			Condition: Required if rpPlanType > 0
	Number (3)		Permitted Values: The value is dependent on the rpPlanType value:
			1 can be 0 or > 1
rpNoOfPayments		С	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)
			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 <i>rpNextPaymentDate</i> , but
			the third and subsequent payments will be calculated from the <i>rpFrequency</i> and <i>rpDueDay</i> values provided.
			Note: these can be changed in the Back-Office/Virtual terminal Recurring Payments Plan menu option.
			Condition: Required if rpPlanType > 0
rpDueDay	Number (2)	С	Permitted Values: The value is dependent on the <i>rpFrequency</i> value:
			If rpFrequency = 0 0
			If rpFrequency = 20, 23, 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
		1 1	32 the last day of the month
			52 the last day of the HIOHH



Parameter	Data Type	Req	Description Payment Acceptance	
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 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 IPG Gateway in text files supplied to the 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 - Direct API 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 wi 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 config for the merchant in the IPG Gateway. The field allows the merchant to change the time interval for se Recurring Payment Plans. Permitted Values: Must be an integer <=180	



Parameter	Data Type	Reg	Description Payment Acceptant
Merchant Managed eGlobal Instalmen		1.04	2000.150.00
The following parameters prefixed with	"mmip" are provided for EV rovided for Direct API Integra		Banamex merchant's to be able to send transaction data that includes the cardholder's chosen Issuing Bank erchants who manage the Instalments Plans data in their own back-offices or virtual terminals.
mmipPlanID	String (50)	N	The merchant's identifier in the merchant's system for the Instalment Plan chosen by the cardholder Condition : none
mmipIssuerName	String (100)	С	The name of the Instalments Plan Issuer in the merchant's system Condition: required if mmipPlanId exists
mmipPlanName	String (25)	С	The name given to the Instalment Plan in the merchant's system Condition: required if mmipPlanId exists
mmipStartDate	Date	С	The date, in the format DD/MM/YYYY, from which the Instalments Plan is available to the merchant's customers Condition: required if mmipPlanId exists
mmipEndDate	Date	С	The date, in the format DD/MM/YYYY > mmipStartDate, up and until which the Instalments Plan is available to the merchant's customers Condition: required if mmipPlanId exists
mmipCurrency	String (3)	С	The currency of the instalments amount offered by the Issuer, as a 3-alpha code as defined in the ISO-4217 standard Condition: required if mmipPlanId exists
mmipMinimumAmount	Number (15,2)	С	The minimum amount, > 0.00, that can be paid in the Instalments Plan Condition: required if mmipPlanId exists
mmipNoOfPayments	Number (3)	С	The number of months, > 1, that the Instalments Plan will be for Condition : required if <i>mmipPlanId</i> exists
IPG Gateway Managed eGlobal Instalm The following parameter is provided for the IPG Gateway Back-Office using the '	EVO MX/Banamex merchan	t's to b	e able to select an Installment Plan from the data stored in the IPG Gateway. The data will have been input in
selectedInstallmentsPlanId	String (7)	N	The Plan ID of the chosen Instalments Plan If not included, the Request will be processed as a single purchase transaction Only used by merchants from the EVO MX Sales Channel



1.1.3 Example

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 merchantId value received in the Session Token Request (section 1.1)	
token	String (40)	The Session Token that is a one-time use, hexadecimal string The Token that must only be used for the Auth/Purchase/Verify 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	

1.2.3 Example

```
{
    "result": "success",
    "resultId": "f52cc38a-7815-4f8c-8687-662cc63d56e9",
    "merchantId": "1111111",
    "additionalDetails": {},
    "processingTime": 0,
    "token": "96b7d82e-349f-4880-9b8a-928636437c75"
}
```



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	

1.3.3 Example



2 AUTH/PURCHASE/VERIFY API Operation

2.1 Auth/Purchase/Verify Request

2.1.1 Format

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

2.1.2 Definition

Parameter	Data Type	Mandatory	Description
			The identifier for the merchant in the IPG Gateway provided
merchantId	Integer (18)	Y	at on-boarding
			This must be the same as that sent in the Session Token
			Request (section 1.1) Session Token received in the Session Token Response -
token	String (40)	Υ	Processed (section 1.2)
			A free text field for use by the merchant that is returned in
freeText	String (200)	N	the Transaction Result Call (see <i>IPG Gateway - 6 -</i>
lifeerext	String (200)	IN	TRANSACTION RESULT CALL), can be used if not supplied in
			the Session Token Request (section 1.1)
			Customer identifier in the merchant system, or the value
			generated by the IPG 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 <i>customerld</i> value is not the
			same held against the payment card token in the IPG Gateway
			database a Auth/Purchase/Verify Response – Not Processed
			(section 2.4) is returned.
			This must be the value supplied in or by the TOKENIZE API
		С	Operation. The value is used to validate that the payment
customerId	String (20)		card token is for the correct customer.
			Mandatory for payment cards method Must not be availabled if quicks at TRUE
			 Must not be supplied if quickSale = TRUE 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 IPG 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)
			Condition: Mandatory, if not received in the Session Token
			Request (section 1.1), otherwise ignored
		С	Customer IP address from where purchase is made. Only IPv4 supported
customerIPAddress	String (39)		Condition: Mandatory, if not received in the Session Token
			Request (section 1.1), otherwise ignored
			Antifraud token
			If an antifraud tool has been executed before an analysis
			identifier is required by payment acquirer.
fraudToken	String (50)	N	Mandatory for transactions conducted in LATAM countries,
			and only when the merchant wishes the transaction to be
			conducted as direct integration (server-to-server), as opposed to browser-redirection based integration.
			Payment solution identifier in the IPG Gateway.
paymentSolutionId	Integer (18)	С	Condition : Mandatory, if not received in the Session Token
			Request (section 1.1), otherwise ignored



Parameter	Data Type	Mandatory	Description Payment Acceptance
setOneClickValueSettingForCard	Boolean	N	If TRUE flags that the cardholder wishes to save the card stored in the <i>specinCreditCardToken</i> parameter for future OneClick transactions • Must be TRUE if the payment card is to be saved Note: the card will only be available for use as a OneClick Payment Method, if the current transaction is successful. Otherwise, the payment card will not be available in the future. The customer will have to make another transaction that is successful.
specinCreditCardCVV	String (4)	С	Credit card CVV, if payment solution is credit card through the ECOM channel. Condition: Mandatory, if not received in the Session Token Request (section 1.1), otherwise ignored
specinCreditCardToken	String (100)	С	The payment card token received in the TOKENIZE API Operation, see IPG Gateway – 1 – TOKENIZE Condition: Mandatory, if not received in the Session Token Request (section 1.1), otherwise ignored
ipPlanId	String (7)	N	The Plan ID of the chosen Instalments Plan If not included in the context of Instalments Plans, the API Operation will be treated as a normal single purchase transaction Only used by merchants from the EVO MX Sales Channel

2.1.3 Example

merchantId=1111111&token=abcde12345abcde12345



2.2 3DS Redirection Response

The 3DS 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 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 IPG 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 (50)		The merchant's reference for the transaction provided in the Session Token Request
		(section 1.1) or that generated by the IPG Gateway
txId	Integer (18)	The unique identifier for the transaction in the IPG Gateway
redirectionUrl	String (URL)	The URL to which the customer's browser must be redirected after the 3D Secure
redirectionori String (OKL)		processing is completed

2.2.3 Example

```
{
    "result":"redirection",
    "merchantId":111111,
    "merchantTxId":"abc123",
    "txId":123,
    "redirectionUrl":"https://mpi.bank.com/123123123-abc-123123123"
}
```



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 merchantld 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 IPG Gateway			
txId	Integer (18)	The unique identifier for the transaction in the IPG Gateway			
acquirerTxId	String (100)	The transaction identifier in acquirer system, if returned			
amount	BigDecimal	The transaction amount, including tax, shipping, surcharge and discount			
	(15.2 or 15.3)	amounts, provided in the Session Token Request (section 1.1)			
currency	String (enum)	The transaction ISO alpha-3 currency code as defined in the ISO 4217 standard,			
		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 IPG Gateway Action executed as provided in the Session Token Request (section 1.1)			
action	String (enum)	("AUTH", "PURCHASE" or "VERIFY")			
		The customer account value/number used in the transaction			
pan	String (100)	If a payment card was used this will be the <i>specinCreditCardToken</i> value			
P 4	08 (200)	provided in the Session Token Request (section 1.1)			
		The brandId value received in Session Token Response (section 1.1), or the			
brandId	Integer (18)	default value used by the IPG Gateway, if not provided			
16 1 11 11	(4.0)	The paymentSolutionId value received in the Session Token Request (section			
paymentSolutionId Integer (18)		1.1)			
		A free text field for use by the merchant that is returned in the Transaction			
freeText	String (200)	Result Call (see IPG 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 amount in the Session Token Request (section 1.1)			
		The ISO alpha-3 currency code, as defined in the <u>ISO 4217 standard</u> , of the			
acquirerCurrency	String (enum)	currency processed by the payment acquirer, which maybe different to the			
		currency in the Session Token Request (section 1.1)			
		For payment cards only: The Transaction Authorisation Code received from the			
		acquirer, format:			
		{ "authCode":"",			
		"cardType":"",			
paymentSolutionDetails	JSON block	"maskedPan":"",			
		"nameOnCard":"",			
		"avsPostCode":"",			
		"addrResultCode":"" }			
		Note: the maskedPan value format is "999999******9999"			
		The identifier for the IPG Gateway Managed Recurring Payment Plan that was			
	Integer (18)	requested in the Session Token Request (section 6.4) through the 'rp' prefixed			
rold		parameters			
rpld		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 in the IPG 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 during the successful processing of a transaction			
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.		

2.3.3 Example

{"result":"success","merchantId":11111,"merchantTxld":"abc123","txld":"123","acquirerTxld":"0009312","amount" :12.50,"currency":"GBP","customerId":"mgn456","action":"PURCHASE","pan":"45ae201ghy23498FjMj701","brandId ":3,"paymentSolutionId":500,"freeText":"Added+10%+discount+on+the+item","language":"en","acquirerAmount":1 6.7,"acquirerCurrency":"EUR","paymentSolutionDetails":{"authCode":"1234"},"status":"NOT_SET_FOR_CAPTURE"}

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.	

2.4.2 Example



Appendix A UAT Trigger Values

When integrating with the IPG 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		No card record	
0.28	ERROR ERROR		
0.29		Lost card, pick-up Stolen card, pick-up	
	ERROR	71 1	
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	
0.42	ERROR	PIN tries exceeded	
0.43	ERROR	Hard capture	
0.44	ERROR	Cut-off in progress	
0.45	ERROR	Issuer or switch inoperative	
0.46	ERROR	Duplicate transaction	
0.47	ERROR	System malfunction	
0.48	ERROR	Wrong PIN, allowable number of PIN tries exceeded	
0.49	ERROR	Time out	
0.50	ERROR	Cryptographic failure	
0.51	ERROR	Routing error	



Amount	Status	Error Message	
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}	
0.72	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}	
0.33	JUCCESS	fuories	



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	СО	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	МО				



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	MH
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