

iPayment Gateway API (IPG API)

Accepting e-commerce payments for
merchants

USER MANUAL

Version 3.0

InterCard Finance AD © 2007 – 2012

Table of Contents

Introduction.....	4
Scope.....	4
Related Documentation.....	5
Where to start	5
Payment Gateway details.....	5
Implementation	5
Interaction Diagram	6
Payment process in steps	7
IPG Payment page.....	7
Use of Trademarks on Merchant's website.....	8
Currencies Accepted at IPG API	10
Security and availability	10
3-D Secure payment.....	10
Important security requirements for making requests to the IPG API.....	11
Security restrictions	11
Test IPG API.....	12
Appendix I – Terms and descriptions	13
Appendix II – Frequently asked questions	14

Accepting e-commerce payments for merchants

USER MANUAL v.3.0



Version control

N	Author	Description	Date posted
1	Yavor Petrov	Version 1.0 (obsolete)	12.2009
2	Yavor Petrov	Version 2.0 (obsolete)	05.2010
3	Milena Dyankova	Version 3.0 draft	15.05.2012
4	Milena Dyankova	Version 3.0	20.05.2012

Introduction

The iPayment Gateway API (IPG API) is an interface for e-commerce payments via payment gateway. The API will gain access to the entry point of IPG managed by InterCard Finance AD (iCARD). By using hosted checkout secure pages, the merchant adhere to compliance rules for handling customer data in a secure way: data is stored on iCARD security servers so that it is not exposed to compromise.

The IPG API enables Merchants to receive money from their customers by temporary redirecting them to <https://icard.com/ipg/>. IPG will handle and guide the cardholder during the payment process, will check the card sensitive data and will process a payment transaction through card schemes (VISA, MasterCard, JCB) or via iPAY Cash Account (for iPay customers).

Once the payment is complete, the customer will be returned to the Merchant's website. The Merchant will receive notification about the payment along with the transaction details.

IPG API will provide:

- Secured page and Secured communication channel with the Merchant
- Storing of merchant private data (shopping cart, amount, payment methods, transaction details etc.)
- Financial transactions to VISA, MasterCard, JCB – transparent for the Merchant
- Operations for the front-end: Purchase transaction
- Operations for the back-end: Refund, Reversal, Get Transaction Status
- 3D processing

Out of scope for this document:

- Merchant statements and payouts
- Merchant back-end (iMerchant)

Scope

The purpose of this document is to specify the IPG API Interface and demonstrate how it is used in the most common way. It is intended to be utilized by the Merchant.

The guide describes the main requirements and processes of the iPayment Gateway. The document provides guidance on what is an IPG API, how it works, getting started, setting up a Merchant ID, main benefits of the API and FAQs.

This document could NOT be used as a technical documentation for integration of the IPG API (with detailed working examples, use cases and error codes).

Related Documentation

For technical specification please refer to iPayment_Gateway_API_v3.1.pdf

For more information about testing environment please refer to IPG_API_testing_guide.pdf. Please note that the test service is available “by appointment”.

Where to start

In order to sign up as an IPG API merchant and start using the IPG API, you need to apply for a Merchant account.

1. You need to fill in a Merchant application form and send it to our Customer Service Department.
2. One of our customer service representatives will contact you back for more details (if needed).
3. We will start a procedure for Risk assessment management of your company and for the websites which will be acquired.
4. Our customer service representative will guide you further through the process.

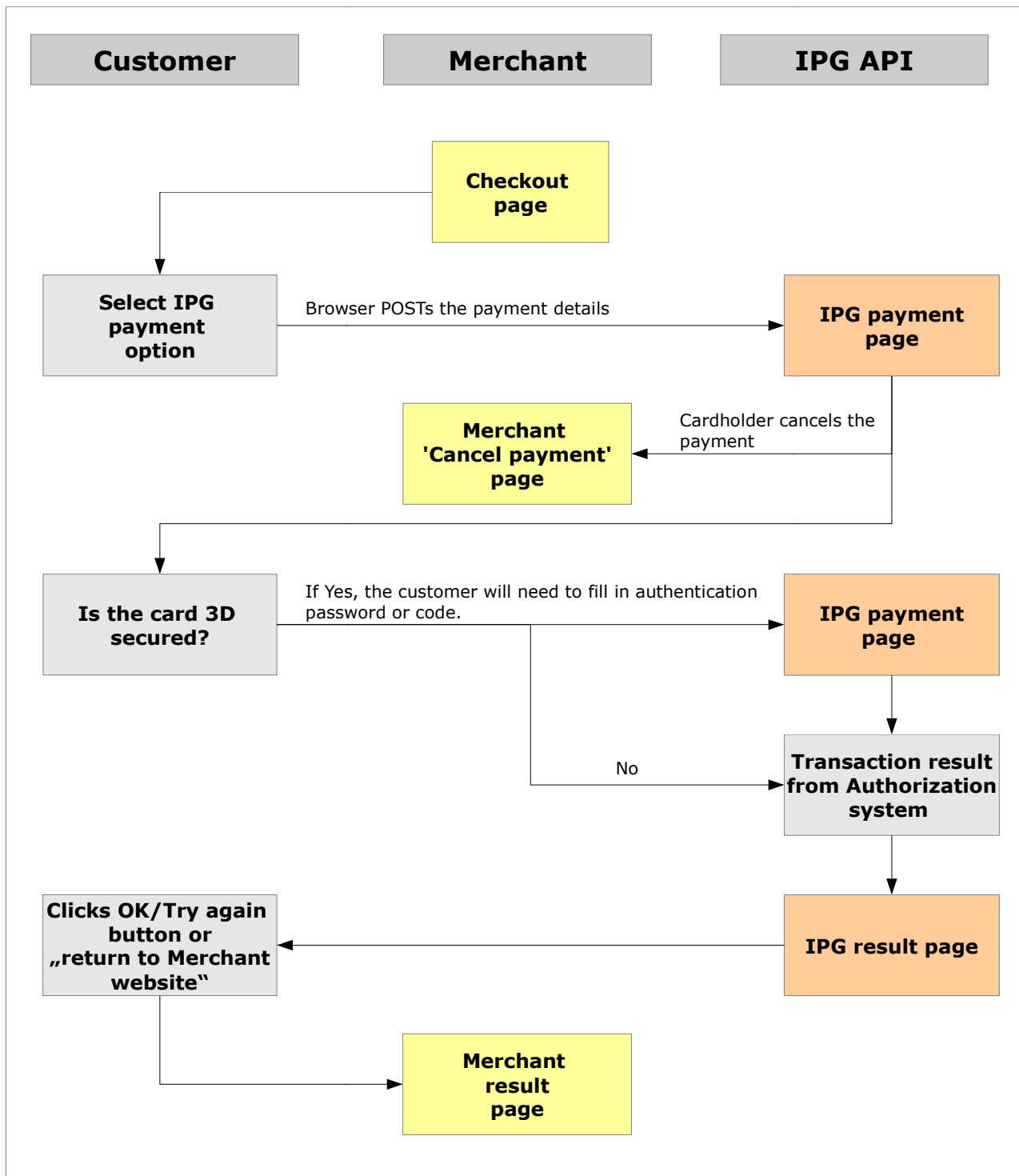
Payment Gateway details

Implementation

The IPG API requires the Merchant to modify their payment page at the shopping cart so to include IPG as a payment option. When the customer chooses IPG as a payment method he will actually submitting a HTML form to the IPG secure web servers using HTTPS protocol. The submitted form will contain all needed information about the payment (such as Merchant's account – Originator, MID, shopping cart, currency, amount, etc.)

Once the IPG API processes the payment, the IPG will pass the result to Merchant Web Server and will redirect the customer to the Web Shop 'checkout result' page.

Interaction Diagram



Note:

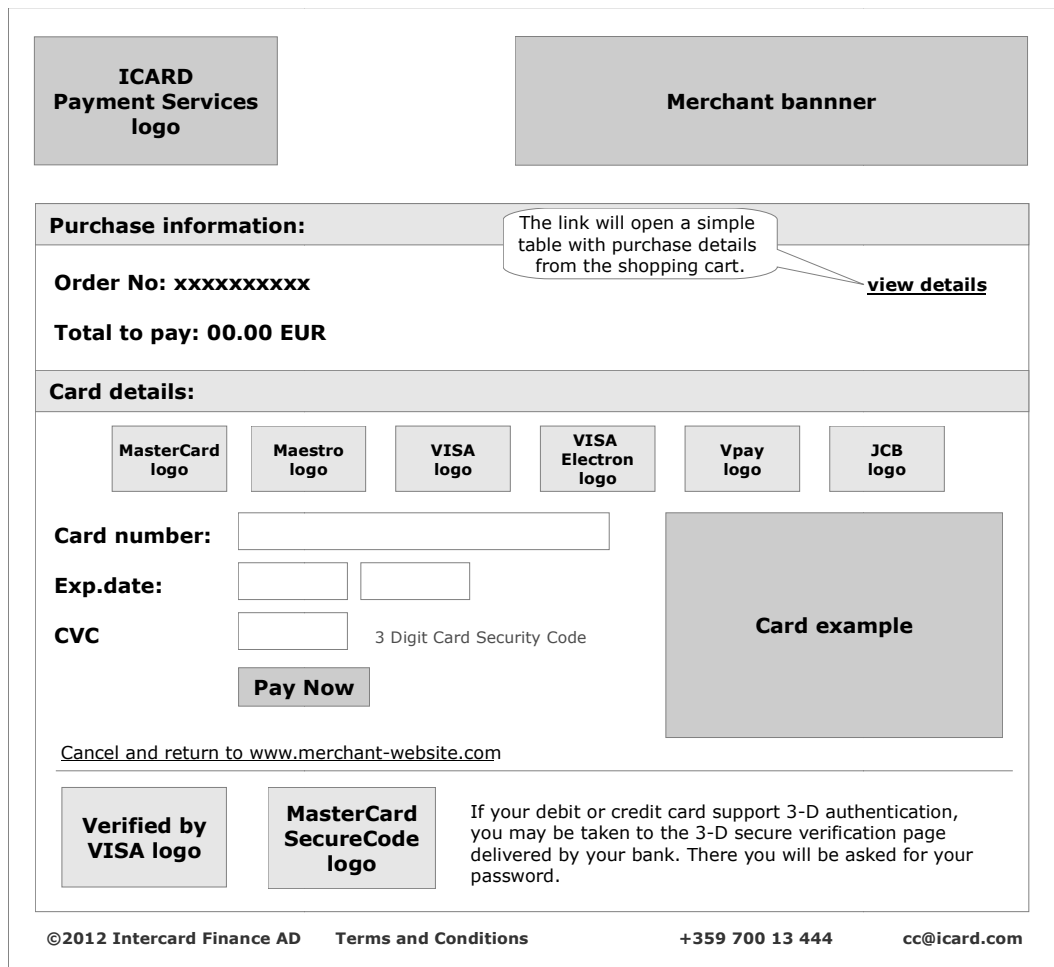
Detailed diagram with all communications and messages between the Merchant website and IPG API is presented in the technical specification. Please refer to [iPayment_Gateway_API_v3.1.pdf](#).

Payment process in steps

1. Internet customer at web shop checkout page chooses IPG as a payment method.
2. Merchant web server initiates payment through IPG.
3. Customer web browser is redirected to IPG web page along with payment details.
4. If customer cancels the payment, he will be redirected to the Merchant's 'Cancel payment' page.
5. On the IPG payment page the customer is requested to input the card data and press Pay Now. IPG handles the 3D secure processing and financial transaction messaging.
6. IPG receives the details for the payment – successful or declined.
7. IPG passes the result to Merchant web server and the customer web browser is directed to the IPG result page.
8. If the payment was unsuccessful the customer could choose to try again or to be redirected to the Merchant's result page. If the payment was successful, the customer web browser will be redirected to the Merchant's result page.

IPG Payment page

The IPG payment page will be presented with the following main elements and images:



The diagram illustrates the layout of the IPG payment page. It features a header with the ICARD Payment Services logo and a Merchant banner. The main content area is divided into sections: Purchase information (Order No: xxxxxxxxxx, Total to pay: 00.00 EUR) with a 'view details' link; Card details (MasterCard, Maestro, VISA, VISA Electron, Vpay, JCB logos); Card number, Exp.date, and CVC input fields; a 'Pay Now' button; and a 'Card example' image. A 'Cancel and return to www.merchant-website.com' link is also present. The footer includes 'Verified by VISA logo', 'MasterCard SecureCode logo', and a note about 3-D authentication. Contact information (+359 700 13 444, cc@icard.com) and terms are at the bottom.

ICARD
Payment Services
logo

Merchant banner

Purchase information:

Order No: xxxxxxxxxx

Total to pay: 00.00 EUR

Card details:

MasterCard logo, Maestro logo, VISA logo, VISA Electron logo, Vpay logo, JCB logo

Card number:

Exp.date:

CVC 3 Digit Card Security Code

Pay Now

Card example

Cancel and return to www.merchant-website.com

Verified by VISA logo

MasterCard SecureCode logo

If your debit or credit card support 3-D authentication, you may be taken to the 3-D secure verification page delivered by your bank. There you will be asked for your password.

©2012 InterCard Finance AD Terms and Conditions +359 700 13 444 cc@icard.com

Note:

The Merchant will be able to have more than one banner for the IPG payment page. The banners need to be with a specific size and will be hosted on the iCARD servers. The Merchant will specify with every single request which one banner will be used in the IPG payment page. For more details please refer to iPayment_Gateway_API_v3.1.pdf

Use of Trademarks on Merchant's website

The Merchant needs to follow the instructions below:

1. General requirements

The iCARD logo and all related with the IPG services logos may not be altered, modified, or changed in any way, without the prior written permission of iCARD. These logos may not be used in a manner that refers disparagingly to iCARD or the IPG service.

The IPG payment option must be shown along with any other payment method on the Merchant's website. The service must be presented in a manner which shows service in equality with all other payment methods.

The Merchant may not use any of the Card scheme logos (VISA, MasterCard, JCB) separately without the iCARD logo, except in case where the Merchant has personal agreement with a specific Card scheme.

The Merchant must comply with iCARD any text descriptions of the IPG service and/or iCARD before publish them online.

The Merchant may use on his website any logo available on icard.com website / Acquiring / e-commerce / resources. If the Merchant needs custom size or solution, he must contact his customer service representative.

2. Payment method page

If the Merchant has separate payment method page on his website, he needs to describe the IPG service, complying with the above General requirements.

3. Checkout page

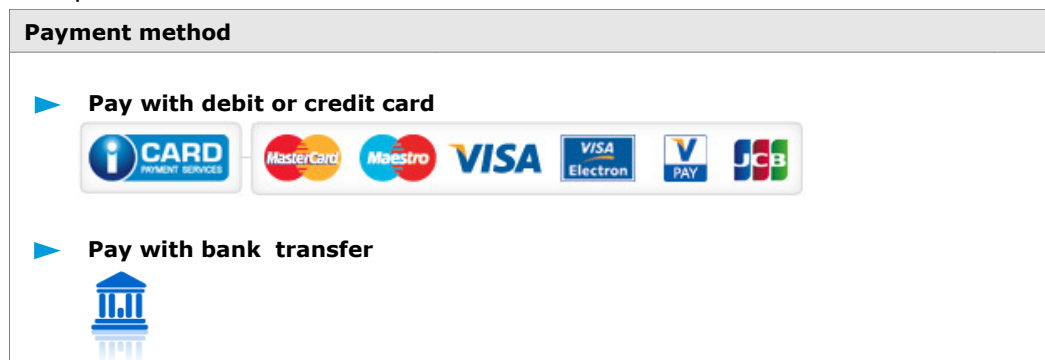
The IPG payment method must be presented on the Merchant's check out page complying with the above General requirements.

Accepting e-commerce payments for merchants

USER MANUAL v.3.0



Example:



4. Redirecting page

If the Merchant has a redirecting page between his checkout page and the IPG payment page, the Merchant needs to have the following attributes on this page:

- <https://ipg.icard.com>
- secure payments powered by iCARD or iCARD logo

Example:

Please wait, you are now being redirected to <https://ipg.icard.com>.

You are about to pay via secure payments powered by iCARD using a debit or credit card.

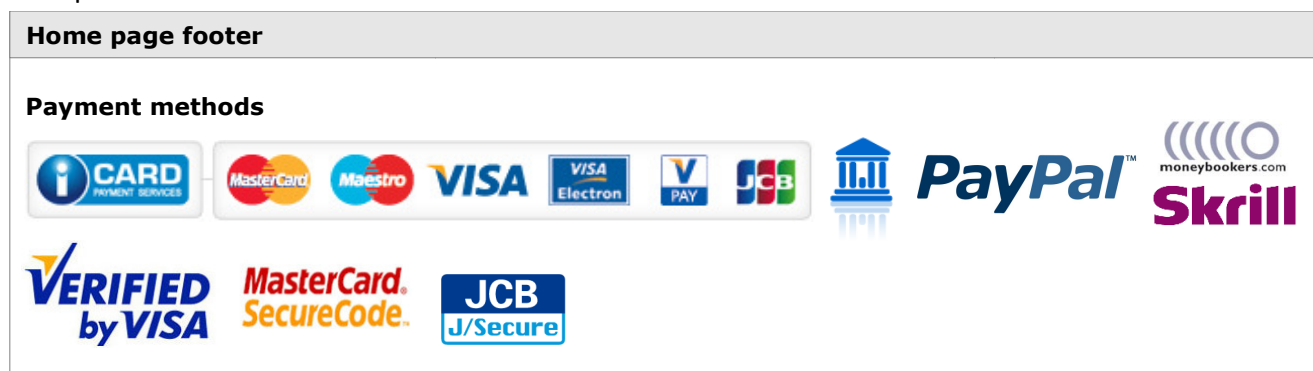
If you are not redirected within 10 seconds, please [click here](#).

5. Other places on the Merchant's website

The iCARD logos must be placed in clear and visible place on the homepage complying with the above General requirements.

The Verified by VISA & MasterCard SecureCode & J/Secure logos could be placed separately in accordance with the requirements of the Card scheme.

Example:





Currencies Accepted at IPG API

IPG API is accepting payments and making settlement in four standard currencies: EUR, USD, GBP and BGN. If the Merchant needs to accept payments in any other currency, he will need to contact his customer service representative for more information.

Security and availability

Connection between Merchant and iCARD is handled through internet using HTTPS protocol (SSL over HTTP). Requests and responses are digitally signed both. iCARD host is located at tier IV datacenter in Luxembourg. Public address for IPG is BGP enabled and available through all first level internet providers.

Exchange folder for partners (if needed) is located at a SFTP server which enables encrypted file sharing between parties. The partner receives the account and password for the SFTP directory via fax, email or SMS.

iCARD supplies an emergency support line via e-mail or phone which is 7x24 enabled and reaches certified engineers.

3-D Secure payment

To make online transactions using credit cards safer and more secure, iCARD as an acquiring bank, supports 3-D secure payments. This authentication ensures that even in the case of lost or stolen card, the card cannot be misused online without the knowledge of the IPIN code.

3D Secure authentication requires password or code called an IPIN, or 3D Secure IPIN. When completing an online transaction, the customer must verify his IPIN along with the rest of his credit or debit card details.


This service is available only for Merchant's accounts which support 3-D secure and in case the customer credit card is 3-D secure.

Depending on the Card scheme and the Issuing bank, the customer will see an additional step in the IPG payment page. Please take a look at the VISA example below:

Accepting e-commerce payments for merchants

USER MANUAL v.3.0





Cardholder bank's logo

Added Protection
Please submit your Verified by Visa password.

Merchant:

Amount:

Date:

Card Number:

Personal Message:

Password:

[I forgot my password](#)

@ Copyright 2004, Visa U.S.A. All rights reserved.

Important security requirements for making requests to the IPG API

All requests to the API are standard HTTPS requests. The 'User-Agent' HTTP request header is required by IPG API.

It is a means of verification of the program on the client host and if the client does not send this string, we cannot verify nor log it and the customer will see an IPG error page with the following text: "You are not able to proceed with the payment process. Some of required information is missing. Please try again. " and a link to the Merchant's website.

Sending the 'User-Agent' is one of the principle rules of our network security and is usually a simple setting in client programs. If you are against sending the header for tracking reasons, you may be interested to know that this is used as a loophole by potential attackers.

Security restrictions

In every message a signature is supplied. The signature is a signed HASH of all the values from properties sent in the request.

For signing process, both iCARD and the Merchant generate public and private **security key pairs** and exchange the public keys. Every of the parties are using the private key to sign the message and the opposite side authenticate the sender with corresponding public key.

Accepting e-commerce payments for merchants

USER MANUAL v.3.0



IPG supports unlimited number of exchanged keys, for iCARD and Merchant both. A key index is assigned to every key. The key index of the key used to sign the request is supplied as a parameter in every transmission.

For more details please refer to iPayment_Gateway_API_v3.1.pdf.

Test IPG API

A “by appointment” test service is available which allows the validation of the API calls. Testers should negotiate an exclusive access to the testing service and ensure monitoring by iCARD engineer.

For more information about testing environment please refer to IPG_API_Testing_guide_v3.0.pdf.



Appendix I – Terms and descriptions

API - Application Programming Interface

MID - Merchant Identifier

PAN - Primary Account Number - Unique payment card number that identifies the Issuer and the particular cardholder account.

TID - Terminal Identifier

Acquirer/Acquiring Bank – A licensed member of Visa and/or MasterCard who contracts with merchants to accept credit card processing and enters data into the account system.

Batch – The total number of card transactions at the end of a business day.

Capture – The authorization or settlement of a credit card processing transaction.

Card Validation Code (CVC) or Card Verification Value (CVV) – Three digits encrypted in the magnetic stripe on the back of the card. This is used as a method of verification during credit card processing.

Decline – The status of the transaction in case the bank does not authorize it.

Issuer/Issuing Bank – The financial institution that holds the merchant contract with Visa / MasterCard and issues cards to cardholders.

Merchant – The business that accepts credit card processing.

Merchant Account – A bank account that allows merchants to accept credit card transactions.

Point of Sale Terminal – An electronic machine used to collect card information during purchases.

Shopping Cart – The software on a website that allows a customer to gather purchases.

Void – The cancellation of a current transaction that has begun but not been settled.

3-D Secure™ (3DS) - New technical standard developed by Visa, MasterCard and JBC, designed to combat online credit card fraud. Cardholders who have registered for Verify by Visa®, MasterCard SecureCode® or J/Secure® use their password to validate their identity whenever they make a purchase on a participating site.

Appendix II – Frequently asked questions

Why to choose IPG API? What are the main benefits of the IPG API?

The IPG API has lots benefits for the merchants, however the most important are:

- The IPG ensures security transactions to be sent over the Internet.
- It is easy to implement in your website.
- You do not need to worry how to organize, collect and storage sensitive customer data on Security servers, respectively to meet all the requirements for these procedures. All this is saving you time and reduce the costs.
- You will be able to support multi payment service providers (card schemes) with a single implementation.
- You will be able to provide a convenience to your customers.

How do I obtain a merchant account?

Please fill in a merchant application form and submit it to our Customer Service Department. Our representative will guide you through the process.

When and where I will receive my money?

Along with the Merchant account you will get a fully operated iPay business account. You will receive all your payouts in your iPay business account in weekly basis. There you could decide how to operate with your cash balance – to withdraw it in someone of your bank accounts or from any ATM 24/7, to send them in another iPay account or shopping online.

If the customer pays with his iPay account, you will receive the money immediately.

Do I have to create separate Merchant IDs for separate websites? What about for separate currencies?

Yes. You will need to have a separate Merchant ID for every single combination website-currency.

For example: If you have two websites and you want to receive payments in two different currencies for both websites, you will have four Merchant IDs.

How many websites could be linked to my merchant account?

There are no restrictions about how many websites you will link to your Merchant account.

What if I need to cancel the service? Do I need to cancel the merchant account too?

Yes, you will need to cancel the Merchant account. As to the cancel procedure, please refer to your contract or ask for more details someone of our customer service representatives.

Accepting e-commerce payments for merchants

USER MANUAL v.3.0



How much does it cost to use IPG API on my website?

The price could depend on the Risk Assessment of your company and the websites you will want to be acquired. Please refer to our tariff or ask for more details someone of our customer service representatives.

Will the IPG API going to collect any additional fees from the cardholder for every transaction?

No. The IPG API will not going to collect any fees from the cardholder.

Which debit and credit cards will I be able to accept?

You will be able to accept any debit or credit cards which are branded with VISA, VISA Electron, Vpay, MasterCard, Maestro or JCB.

Is it possible for me to cancel an order received from a customer? Are there any charges for such cancellation?

Yes. You could cancel a transaction within 7 days without any charges. For more details please contact your customer service representative.

Can I change my merchant account details?

Yes, you could. Please contact your customer service representative.

How long does it take for a transaction to take place?

Transactions submitted to the IPG API are processed in real time and take approximately 1-3 seconds to return a response.