



Trusted Shops Integration Handbook

Trustbadge and
Buyer Protection Excellence

Version 2.3 en-GB

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1. The Trusted Shops Trustbadge with Trustcard

Trusted Shops has developed a modern, eye-catching integration technology that Trusted Shops members can use to communicate their trustworthiness even more clearly from the start – the Trustbadge.

Please go to <http://www.trustedshops.co.uk/trustbadge> to find out how you can create your Trustbadge code and integrate it in your shop.

There you will also find a preview function which can be used to test the different variants of the Trustbadge directly with your shop layout.

URL for Trustbadge integration

<http://www.trustedshops.co.uk/trustbadge>

2. Trusted Shops Buyer Protection

2.1 How it works

The option of including Trusted Shops Buyer Protection in a transaction is displayed at the checkout at the point of selecting the payment type. The buyer can activate or deactivate buyer protection in the shop by means of a checkbox. When a customer selects Trusted Shops buyer protection, this is added to the order as a product.

The checkbox is deactivated by default; this also applies if the customer leaves this page and later calls it up again, for example after having added further products to the shopping basket. The appropriate Trusted Shops Buyer Protection product should be displayed to suit the value of the shopping basket (goods plus shipping costs). In each case, the appropriate option is the smallest Trusted Shops product that will fully cover the purchase (e.g. "Trusted Shops Buyer Protection up to £1500" is suitable for a purchase worth £600).

If selected, the buyer protection product is added on the order confirmation page into the end price calculation along with the products ordered and shipping costs. Once the order has been confirmed, the Trusted Shops Buyer Protection web service is called up using the [requestForProtectionV2\(\)](#) procedure with the appropriate parameters. Shortly afterwards, [getRequestState\(\)](#) is invoked to check whether Trusted Shops has accepted the guarantee application. The guarantee is subsequently entered into the Trusted Shops system and the customer is notified by e-mail. Finalised guarantees can be viewed at the shop login at <https://www.trustedshops.com/en/shop/login.html>.

The online retailer must ensure that all buyer protection requests have been successfully entered via the interface and also that the guarantees have been successfully agreed.

2.1.1 Schematic process sequence in the shop

Trusted Shops Buyer Protection is offered at the checkout along with the choice of payment type.

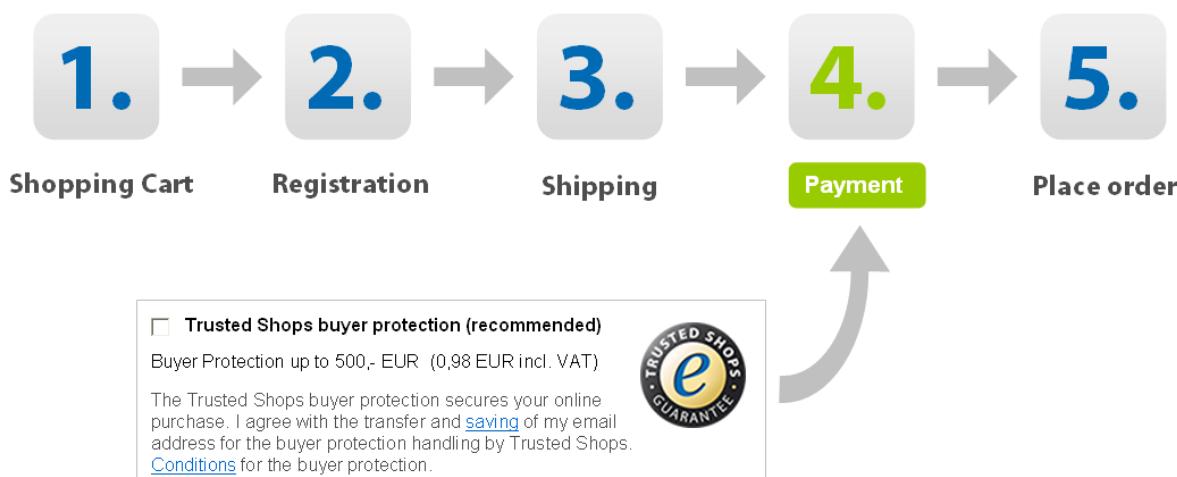


Fig. 3: Schematic representation of Trusted Shops Excellence buyer protection

2.1.2 Technical process sequence

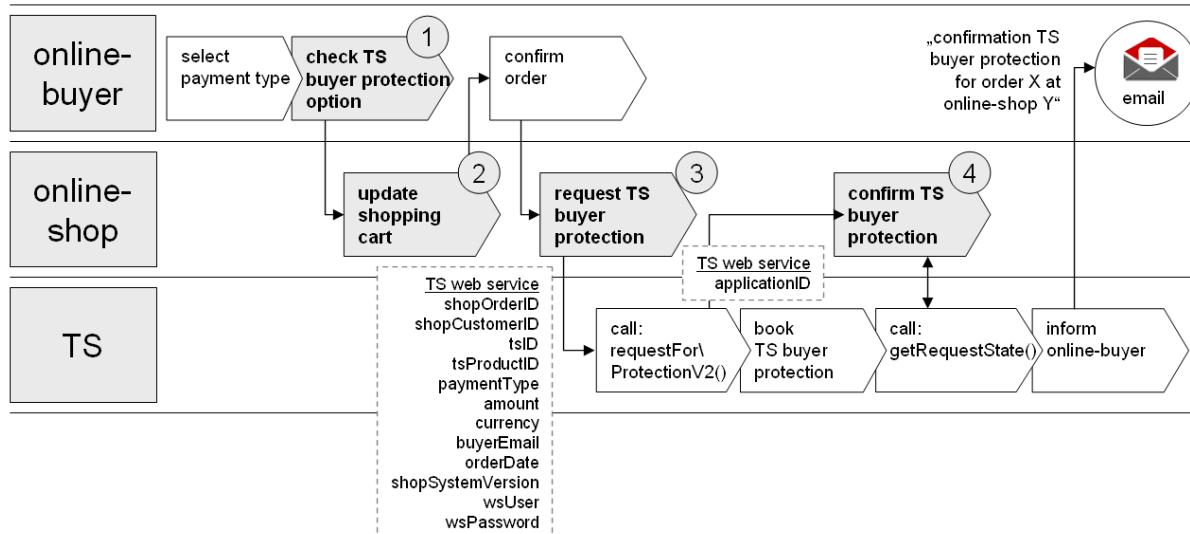


Fig. 4: Technical process sequence of Trusted Shops Excellence buyer protection

2.1.3 Features and calculation of buyer protection products

Trusted Shops Buyer Protection is set up by a buyer protection product being added to the shopping basket during the ordering process.

The designation of the buyer protection product itself contains the maximum guarantee amount and the insurance period. For example the product TS100629_1500_30_GBP indicates buyer protection of up to 1500 GBP with a guarantee period of 30 days.

Please store the following Trusted Shops buyer protection products in your shop, unless you have been provided with other products.

Trusted Shops Product ID (tsProductId)	Net Price
TS100629_500_30_GBP	£0.82
TS100629_1500_30_GBP	£2.47
TS100629_2500_30_GBP	£4.12
TS100629_5000_30_GBP	£8.24
TS100629_10000_30_GBP	£16.47
TS100629_20000_30_GBP	£32.94

The following rules apply to buyer protection products:

- Trusted Shops Buyer Protection products are stored in the shop and/or database but are not displayed in the shop's regular product catalogue.
- Buyer protection products can only be requested at checkout.
- Buyer protection products are available without restriction.
- The shopping basket can contain a maximum of one buyer protection product.
- Buyer products are always stored with their net price.
- Tax should be applied to buyer protection products at the rate applicable to the overall order. Where the products are subject to a uniform tax rate, that rate shall prevail. Where the

shopping basket contains items subject to different rates of tax, we recommend that you apply the higher rate. Shops should clarify the specific details of this individually with their tax advisor.

- The prices of buyer protection products are displayed in the shop in the same way as other prices - i.e. as a gross price for B2C business and as a net price for B2B.
- The sum paid for Trusted Shops Buyer Protection products increases the total amount of a purchase. However, Trusted Shops Buyer Protection applies solely to the products sold by the shop and the associated transport services; buyer protection is not itself protected.
- Any discounts that may be offered will not apply to the buyer protection products.

In the following example, the total invoice amount is £195.98; Trusted Shops Buyer Protection is requested for an amount of £195.00:

Example calculation:

Product 1	£150.00
Product 2	£50.00
Discount for payment type 5%	- £10.00
Shipping costs	£5.00
Trusted Shops Buyer Protection up to £500	£0.98

Invoice amount	£195.98

2.1.4 Administration of Trusted Shops Certificates

A Trusted Shops certificate is identified by a 33-character alphanumeric key, known as the Trusted Shops ID (TS-ID). The Trusted Shops ID is sent to the online retailer following registration with Trusted Shops. A Trusted Shops ID is only ever valid for exactly one shop URL in one language. Where a shop system contains more than one online shop and/or versions of a shop in several languages, each individual instance is assigned its own Trusted Shops ID. For each Trusted Shops Certificate a login is issued to the web service, through which buyer protection can be requested.

2.2 Trusted Shops Web Service for setting up buyer protection

This web service for the front end of the shop offers two methods for setting up and checking buyer protection.

The web service for setting up buyer protection can be reached via the following URIs at Trusted Shops.

Test environment web service URI (“sand box”)

```
https://protection-qa.trustedshops.com/ts/protectionservices/ApplicationRequestService?wsdl
```

Live system web service URI

```
https://protection.trustedshops.com/ts/protectionservices/ApplicationRequestService?wsdl
```

2.2.1 requestForProtectionV2()

The `requestForProtectionV2()` procedure is the central function within the process for setting up a buyer protection guarantee. The transaction data required from a purchase are sent to Trusted Shops and the web service generates a buyer protection request. The requests are checked by Trusted Shops for their formal validity, stored and processed at regular intervals.

Please also note the information on [error handling](#), to always ensure that the buyer protection requests have been successfully entered through the interface.

2.2.1.1 Designation and data types

WSDL definition:

```
<message name="ApplicationRequestService_requestForProtectionV2">
  <part name="tsId" type="xsd:string"/>
  <part name="tsProductId" type="xsd:string"/>
  <part name="amount" type="xsd:decimal"/>
  <part name="currency" type="xsd:string"/>
  <part name="paymentType" type="xsd:string"/>
  <part name="buyerEmail" type="xsd:string"/>
  <part name="shopCustomerID" type="xsd:string"/>
  <part name="shopOrderID" type="xsd:string"/>
  <part name="orderDate" type="xsd:dateTime"/>
  <part name="shopSystemVersion" type="xsd:string"/>
  <part name="wsUser" type="xsd:string"/>
  <part name="wsPassword" type="xsd:string"/>
</message>
```

2.2.1.2 Parameters

Parameter	Description	Comment
tsID	Trusted Shops ID of certificate	Mandatory, issued by Trusted Shops for each certificate; each shop language and each separate shop in a "multi-shop solution" requires an individual certificate
tsProductId	Buyer protection product code	Mandatory, see table of buyer protection products
amount	Invoice amount incl. shipping costs	Mandatory, format with decimal separator (point) and two subsequent digits (e.g. 3130.47)
currency	Currency of purchase, ISO 4217 3 characters	Mandatory, e.g. ISO code for euro = EUR
paymentType	Payment type constant	Mandatory, Trusted Shops-specific, see table of available payment types
buyerEmail	E-mail address of buyer	Mandatory
shopCustomerID	Buyer's customer number	Mandatory; if not given, the constant value "0" is assigned
shopOrderID	Buyer's order number	Mandatory
orderDate	Date of ordering from online shop	Mandatory, format: 2011-10-31T09:30:00
shopSystemVersion	Version of shop software and, where applicable, of the Trusted Shops module, e.g. "topshop v2.1"	Mandatory, any string
wsUser	Web service user	Mandatory, issued separately by Trusted Shops for each certificate
wsPassword	Web service password	Mandatory, issued separately by Trusted Shops for each certificate

2.2.1.3 Return values

A positive return value means that the web service request has been processed successfully; the value represents the buyer protection request number. A negative return value indicates an error; the value represents the [error code](#).

2.2.1.4 Example code (PHP)

The following example describes how the buyer protection interface is called up once the end customer has completed the order. PHP 5 SOAP Extension is required. **Marked sections** should be altered as required.

Example PHP Code (please replace yellow marked text):

```

define("SOAP_ERROR", -1);
define("TS_SERVER", "protection.trustedshops.com");

# Collect parameters for the webservice call
# TS-ID received by Trusted Shops
$tsId = "X1234567890ABCDEFGHIJKLMNPQRSTUVWXYZ";
# Defined by Trusted Shops, depends on order total amount
$tsProductId = "TS080501_500_30_EUR";
$orderDate = date("Y-m-d", time()) . "T" . date("H:i:s", time());
$shopSystemVersion = "Shop 4.0 TS.01";
# Collect other parameters
$decimalAmount = (double) $amount;
# ...

# Call TS protection webservice
$ini = ini_set("soap.wsdl_cache_enabled", 1);
try
{
    $wsdlUrl = "https://" . TS_SERVER .
"/ts/protectionservices/ApplicationRequestService?wsdl";
    $client = new SoapClient($wsdlUrl);
    # Set return value for the case if a SOAP exception occurs
    $returnValue = SOAP_ERROR;

    # call WS method
    $returnValue = $client->requestForProtectionV2 ($tsId, $tsProductId,
(double)$amount, $currency, $paymentType, $buyerEmail, $shopCustomerID,
$shopOrderID, $orderDate, $shopSystemVersion, $wsUser, $wsPassword);

} catch (SoapFault $fault) {
    $errorText = "SOAP Fault: (faultcode: {$fault->faultcode}, faultstring: {$fault->faultstring})";
    echo $errorText;
}
# Check return value
# Negative return value is an error code, positive value is the application number
if ($returnValue == SOAP_ERROR)
{
    echo "SOAP error: $errorText";
} else if ($returnValue < 0)
{
    error_log "TS Webservice returns error code $returnValue";
    switch ($returnValue)
    {
        case -10001 :
            echo "Cause: login failed or no valid shop found for tsId '$tsId'";
            break;
        ...
    }
} else
{
    echo "TS Webservice has successfully returned application number

```

```
'$returnValue';
}
```

2.2.1.5 Payment types

When Trusted Shops Buyer Protection is set up for a transaction, the payment type selected by the customer is sent to Trusted Shops. The payment types supported by Trusted Shops are designated as shown below. Please assign the payment types used in the shop to the Trusted Shops payment types.

Code	EN
DIRECT_DEBIT	Direct debit
CREDIT_CARD	Credit Card
INVOICE	Invoice
CASH_ON_DELIVERY	Cash on delivery
PREPAYMENT	Prepayment
CHEQUE	Cheque
PAYBOX	Paybox
PAYPAL	PayPal
CASH_ON_PICKUP	Cash on pickup
FINANCING	Financing
LEASING	Leasing
T_PAY	T-Pay
CLICKANDBUY	Click&Buy
GIROPAY	Giropay
GOOGLE_CHECKOUT	Google Checkout
SHOP_CARD	Online shop payment card
DIRECT_E_BANKING	SOFORT Banking
MONEYBOOKERS	moneybookers.com
DOTPAY	Dotpay
PLATNOSCI	Płatności
PRZELEWY24	Przelewy24
OTHER	Other method of payment

2.2.2 getRequestState()

The `getRequestState()` procedure queries the status of a guarantee request and returns the guarantee number in the event that this is successful.

A positive return value of `requestForProtectionV2()` means that the buyer protection request has been successfully transmitted and is now in a message queue at Trusted Shops. However, semantic errors (e.g. missing or doubled order number) are not detected until the request is

processed. Invoking `getRequestState()` therefore checks whether the guarantee requests sent by [requestForProtectionV2\(\)](#) have been accepted by Trusted Shops, since a Trusted Shops guarantee is only issued for a request that has been processed successfully. Trusted Shops recommends that this is called up automatically at 10-minute intervals by means of a cron job.

Since there is a time delay between the buyer protection request being made in the shop and confirmation being given by Trusted Shops, an [error handling](#) mechanism must be in place. In cases of downtimes at Trusted Shops or SOAP exceptions, the guarantee can be reloaded up to three days later (with repaired transaction data).

2.2.2.1 Designation and data types

WSDL definition:

```
<message name="ApplicationRequestService_getRequestState">
  <part name="tsId" type="xsd:string"/>
  <part name="applicationId" type="xsd:long"/>
</message>
```

2.2.2.2 Parameters

Parameter	Description	Comment
tsID	Trusted Shops ID of certificate	<i>Mandatory</i> , issued by Trusted Shops for each certificate; each shop language and each separate shop in a “multi-shop solution” requires an individual certificate
applicationID	Buyer protection request number	<i>Mandatory</i> , return value of requestForProtectionV2()

2.2.2.3 Return values

A positive return value means that the web service request has been processed successfully; the value represents the guarantee number. A negative return value indicates an error; the value represents the [error code](#).

2.3 Error Handling

During the integration phase and in productive use, you should log error codes and SOAP exceptions so that you can detect implementation and configuration errors at an early stage. With regard to potential exception errors or the non-availability of the Trusted Shops website, error handling ensures that every buyer protection request nevertheless reaches Trusted Shops. The online retailer is responsible for ensuring that every buyer protection request is forwarded to Trusted Shops. Buyer protection requests can be repeated with updated data within three days. The current status of a guarantee can be checked using the [getRequestState\(\)](#) procedure.

Function	Description	Comment
Queue handling	Stores and processes guarantee requests	<i>Mandatory</i> , e.g. with up to 3 retries at 8-hour intervals, then aborts
Logging	Logs guarantee requests, error codes, SOAP exceptions etc.	<i>Mandatory</i> , e.g. in the form of a list of the agreed guarantees on the shop administration dashboard

2.3.1 Error codes

Code	Return value	Cause
-10001	NO_VALID_SHOP	Web service login or TS-ID invalid
-10002	LIMIT_CANCELLED	The shop's credit limit has been suspended by

		Trusted Shops
-10003	DUPLICATE_ORDER_NUMBER	Order number has already been used
-10004	UNSUPPORTED_TS_PRODUCT	Product not supported by buyer protection
-10005	INACTIVE_PAYMENT_TYPE	Payment type is inactive
-10006	UNSUPPORTED_PAYMENT_TYPE	Payment type is not supported
-10007	CURRENCY_MISMATCH	The currency of the buyer protection product is not the same as the currency of the shopping basket
-10008	UNSUPPORTED_CURRENCY	This currency is not supported by this shop
-10009	UNSUPPORTED_EXCHANGE_RATE	This exchange rate is not supported
-10010	NOT_PERSISTENT_PAYMENT_TYPE	This payment type is not supported
-10011	NO_LIMIT	No credit limit available for this certificate
-10012	PAST_DELIVERY_DATE	The delivery date is in the past
-10013	TOO_OLD_ORDER	This guarantee was requested for a purchase made more than 3 days ago
-10014	EMAIL_MALFORMED	Error in format of e-mail address
-10015	ORDER_ID_EMPTY	No order number has been given
-10016	CUSTOMER_ID_EMPTY	No customer number has been given
-10017	LIMIT_OVERFLOW	The credit limit for this certificate has been exceeded.
-10018	EMAIL_EMPTY	No e-mail address has been given
-10020L	ORDER_DATE_FUTURE	The order date is in the future
-11001	INVALID_SECURITY_TOKEN	Invalid security token
-11111	SYSTEM_EXCEPTION	General system error, please contact Trusted Shops

2.3.2 Typical SOAP exceptions

SOAP exceptions may occur during implementation and during operation. The most typical exception errors have the following causes:

Error	Cause
Invalid number of payload elements: 12 Error code: env:Server	Check number and sequence of parameters sent
java.lang.NumberFormatException	Invalid currency amount
Date value does not follow the format ...	Invalid data
String index out of range: 0	Empty data



2.3.3 Identifiers for test environments

During the implementation phase, use the following identifiers for the individual languages. You will receive the identifiers for the live system after authorisation by the Trusted Shops employee responsible for you.

Web service identifiers for testing:

Trusted Shops ID (tsID): X735A78386D67108939130E66BA2221AC

User name (wsUser): testExcellencePartnerEN

Password (wsPassword): test12345678

2.4 Integration of buyer protection into the shop front-end

2.4.1 Position of the Trusted Shops buyer protection box

The Trusted Shops Excellence buyer protection box is displayed in a prominent position at the stage of payment type selection at checkout.

2.4.2 Texts within the Trusted Shops buyer protection box

Trusted Shops Buyer Protection (recommended)

Buyer protection up to 500 GBP (0,98 GBP incl. VAT)

The Trusted Shops Buyer Protection secures your online purchase. I agree to my email address being transferred and saved for the purposes of Buyer Protection processing by Trusted Shops. Conditions for Buyer Protection.

Fig. 5: Example of an Excellence buyer protection box

The following texts are used in the buyer protection box for each shop language. Mention is made of any VAT component without giving the specific rate, i.e. by the wording “inc. VAT” (or in the case of B2B, “ex VAT”).

Country-specific texts for language EN please replace (yellow marked text):

[] Trusted Shops Buyer Protection (recommended)

Buyer protection up to 500 GBP (0.98 GBP incl. VAT)

The Trusted Shops Buyer Protection secures your online purchase. I agree to my email address being transferred and saved for the purposes of Buyer Protection processing by Trusted Shops. Conditions for Buyer Protection.

2.4.3 Links inside the buyer protection box

The Trusted Shops logo and the highlighted terms are linked as follows, independently of language. The parameter *shop_id* corresponds to the Trusted Shops ID of the certificate. For each link use the link parameter *target=_blank*, which opens the page in a new browser window or tab.

URL Link Trusted Shops Logo (please replace yellow marked text):

https://www.trustedshops.co.uk/shop/certificate.php?shop_id=shop_id

URL Link “saved“ (please replace yellow marked text):



http://www.trustedshops.com/shop/data_privacy.php?shop_id=shop_id

URL Link "conditions" (please replace yellow marked text):

http://www.trustedshops.com/shop/protection_conditions.php?shop_id=shop_id

3. Support

Should you have further questions concerning the integration of the Trusted Shops seal with buyer protection or of customer reviews, please contact:

Trusted Shops GmbH
Customer Service

E-mail: members@trustedshops.co.uk