HM Land Registry

Business Gateway Developer pack

Developer guide

Version 1.4

Digital Data & Technology (DDaT)
Seaton Court
2 William Prance Road
Plymouth
Devon
PL6 5WS

www.gov.uk/land-registry

1. Overview

1.1 Objective

The objective of this document is to provide comprehensive technical information about Business Gateway for use by third party software vendors.

1.2 Intended audience

Case management software (CMS) vendors and conveyancers.

2. Organisation of the guide

Chapter Name	Chapter contents
1. Overview	Gives an insight into the objectives and intended audience of the document.
2. Organisation of the guide	Gives an overview of organisation of the chapters in this document.
3. System overview	Gives a brief overview of HM Land Registry and Business Gateway services.
4. Prerequisites	Contains a list of prerequisites for generating web services clients and invoking Business Gateway's services.
5. Design constraints	Gives an insight into the design constraints of the system.
6. APIs and schema	Gives detailed information of the APIs and the XML structures for input and result parameters.
7. Business Gateway services URLs	Provides a list of URLs for downloading the WSDL schemas and the request/response schemas.
8. Upgrade & Change Policy – vendor summary	Summary of the Business Gateway Upgrade & Change policy.
9. Abbreviated Terms	Explanation of acronyms used.

3. System overview

The Business Gateway system allows CMS vendors to have a direct interface with Land Registry e-services. It provides a framework to streamline and improve their business proficiency. Business Gateway provides an electronic XML interface for interoperability between CMS and existing HM Land Registry services. A mutual SSL connection is established between the external system and Business Gateway's web services for exchange of information.

3.1 Services exposed via Business Gateway

3.1.1 Information services
- Daylist enquiry.
- Daylist enquiry poll request.
- Enquiry by property description.
- Enquiry by property description poll request.
- Land charges bankruptcy search.
- Land charges bankruptcy search poll request.
- Land charges full search.
- Land charges full search poll request.
- Official copy title known.
- Official copy title known poll request.
- Official search of part with priority.
- Official search of part with priority poll request.
- Official search of whole with priority.
- Official search of whole with priority roll request.
- Register extract service.
- Register extract service poll request.
- Search of the index map.
- Search of the index map poll request.

3.1.2 electronic Document Registration Service (e-DRS)
- Application to change register
- Application to change register poll request
- Attachment
- Attachment poll request
- Correspondence poll request
- Early Completion poll request

3.1.3 Verification Services
Online Owner Verification

3.1.4 Local Land Charges Service
- Local land charges search

3.1.5 Outstanding Requests service

- Outstanding Requests

4. Prerequisites

4.1 Prerequisites for generating a web service client

- A valid SSL certificate is required for downloading the WSDL and schema files from HM Land Registry Business Gateway. This certificate is needed for mutual SSL authentication.
- A list of URLs for all services provided by Business Gateway to download the respective WSDL and schema files for a given service.

4.2 Expiry of Certificates

- HM Land Registry Business Gateway certificates expire after 3 years. When this date is approaching you will need to contact your Account Manager who can raise a request to have new Certificates issued. If your certificate expires you will not be able to access the Business Gateway until the new certificate is installed and your system is configured to use it.

4.3 Prerequisites for invoking Business Gateway's services

- A valid SSL certificate issued by Business Gateway is required. This certificate is used to enable mutual SSL authentication. This certificate is installed once at the CMS client site.
- A list of URLs is required for all services provided by Business Gateway in order to invoke the required services.
- An active user account to use Business Gateway. The user ID and the password is the same as for the HM Land Registry portal.
- An active variable direct debit (VDD).
- The request should conform to the request schema.
- The request must contain Business Gateway User ID and password and locale information as part of the SOAP header.
- A unique message ID generation mechanism should be followed for every request being sent to Business Gateway (see Note 1).
- A mechanism is required to temporarily store the generated message ID. This message ID is used to fetch the response when the end user does not receive the synchronous response from Business Gateway for example when a request is made out of hours or when the message is lost in transit.

Note 1

Reliable Messaging:

Message ID is used for the reliable messaging mechanism used in Business Gateway. The external system is required to generate a unique identifier for every request that has been sent to Business Gateway.

This message ID is used to receive a response from Business Gateway if the original response is lost due to network issues or other reasons such as if the original request was submitted out of hours.

Business Gateway uses the following information for determining whether a given request is a new request.

1. Message ID.

2. Service Type (for example bankruptcy search).

3. User ID.

If the system determines that the given request is not new then the system will try to find the existing response and return it without processing the request again.

4.4 Development activities

- Install SSL certificates issued by HM Land Registry as trusted root.
- Install client digital certificate issued by HM Land Registry into client key store.
- Develop a mechanism to generate and store unique message IDs with respect to the request sent to Business Gateway.
- Consume the WSDL offered by Business Gateway and develop the following functionality based on the web services exposed.
- Develop a mechanism to send requests to Business Gateway for each web service that has been exposed.
- Develop a mechanism to submit Outstanding Request requests to get information about requests where the response is not available synchronously
- Develop a mechanism to send polling requests for the requests returned by the Outstanding Request service.
- Develop a mechanism to process responses.
- Develop a mechanism to deal with exceptions.
- For each request sent, the SOAP header must contain the user ID, password and locale information.
- For each request sent, the HTTPS channel will be mutually authenticated using certificate exchange.

5. Design constraints

Web service requests over HTTP/HTTPS internet protocols are not reliable and lead to lost messages between request and response. Hence, a reliable messaging mechanism (see Note 1 above) is implemented in Business Gateway to ensure that the responses are not lost between the client CMS software and Business Gateway. The constraints implemented to ensure reliable messaging are as follows:

- unique message ID
- process request only once.

5.1 Unique message ID

The client sends a SOAP request with a unique message ID and waits for the response. In case the client does not receive a response within a specified period of time, it will send the request with same message ID once again.

The client ensures that all message requests have a unique message ID. It is the responsibility of Business Gateway to correlate the SOAP request and response with the same message ID.

5.2 Process request only once

Business Gateway processes the request for the first time and stores the response in a database. Next time a request arrives as a result of a lost message, with the same message ID for the same service type and from the same user ID then the response is sent from the stored data.

6. APIs and schema

6.1   Information service Schema

- Daylist enquiry.
- Enquiry by property description.
- Land charges bankruptcy search.
- Land charges full search.
- Official copy title known.
- Official search of part with priority.
- Official search of whole with priority.
- Register extract service.
- Search of the index map.

6.2   eDocument Registration Services

- Application To Change Register
- Attachment.
- Correspondence.
- Early Completion

6.3   Verification Services

- Online Ownership Verification

6.4   Local Land Charges Services

- Local land charges search

6.5   Utility Services

- Outstanding requests.

6.6 API request and response

6.6.1 Request Type

Normal Request
A request is considered to be a normal request when it is sent to Business Gateway during working hours. The original request is stored by Business Gateway along with the response.

Poll Request
A Poll request can be used in a number of scenarios:

- Collecting Out of Hours applications

When a request is sent to Business Gateway 'out of hours' or after the day list is closed, the system calculates a suggested date and time at which the response to the request will be made available. The client can then make a poll request to Business Gateway at the suggested date and time, with the message ID of the original message, to retrieve the stored response.

- Manual Processed applications
  A poll request may be used to collect the result of a Business Gateway application that has been processed manually by LR Staff.

For optimal usage the system can be written to automatically call the Outstanding Request service, which will provide details of requests that have a new response to be collected. These can then automatically be sent through the corresponding Poll Request services, enabling the response to be collected as early as possible. This is the only way to collect some of the messages sent when using electronic Document Registration Service (e-DRS). We recommend following this process every couple of hours.

6.6.2 Request structure

Business Gateway's SOAP request consists of the following elements:
SOAP header must contain (refer to figure 1):
- user ID
- password
- locale information.

The SOAP body contains the web service request as shown in figure 1.

```
Figure 1


<!--  SOAP envelope starts -->
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:drs="http://drsv1_0.ws.bg.lr.gov/"
xmlns:req="http://www.oscre.org/ns/eReg-
Final/2012/RequestApplicationToChangeRegisterV1_0">

      <!--  SOAP header starts -->
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:UsernameToken>
        <wsse:Username>userName here</wsse:Username>
        <wsse:Password type="http://docs.oasis-open.org/wss/2004/01/oasis-
200401-wss-username-token-profile-1.0#PasswordText">password
here</wsse:Password>
      </wsse:UsernameToken>
    </wsse:Security>
    <i18n:international xmlns:i18n="http://www.w3.org/2005/09/ws-i18n">
      <i18n:locale>en</i18n:locale>
    </i18n:international>
  </soapenv:Header>
  <!--  SOAP header ends -->

  <!--  SOAP body starts -->
  <soapenv:Body>
      <!--  SOAP body contains web service request -->
  </soapenv:Body>
  <!--  SOAP body ends -->

</soapenv:Envelope>
<!--  SOAP envelope ends -->
```

6.6.3 Response types

Business Gateway sends the following types of responses as part of request processing:

- Normal response when the request is processed successfully. This includes the response for a Business Gateway application that has been processed manually.
- Acknowledgment response when the requested service is not available, or the application requires manual processing.
- Error response when one or more business rules failed while processing the request.
- SOAP fault response when some unexpected exception occurred while processing the request. For example, the submitted request does not contain a value in a mandatory element of the request schema corresponding to the requested service. Refer to figure 2 for the structure of this type of response.

```
Figure 2

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:drs="http://drsv1_0.ws.bg.lr.gov/"
xmlns:req="http://www.oscre.org/ns/eReg-
Final/2012/RequestApplicationToChangeRegisterV1_0">
        <soapenv:Fault>
        <faultcode>soapenv:SchemaFault</faultcode>
        <faultstring>Schema Errors have occured</faultstring>
        <detail>
          <drs:SchemaException>cvc-pattern-valid: Value '' is not facet-
valid with respect to pattern '[A-Z]{0,3}[0-9]{1,6}[ZT]?' for type
'TitleType'.</drs:SchemaException>
           <drs:SchemaException>cvc-type.3.1.3: The value '' of element
'TitleNumber' is not valid.</drs:SchemaException>
        </detail>
      </soapenv:Fault>
```

6.6.4 Response structure

Business Gateway's response structure has the following elements:
Response type code indicates the response type in the response structure. In
Business Gateway the response type code element can have one of the
following values

- 10 (for Acknowledgement).
- 20 (for Rejection).
- 30 (for Success).

Acknowledgement
This element response type contains the following information:
Expected time when user is supposed to send a poll request to get the
response. (this is only provided if the service was not available when the
application was submitted)
HMLRReference, this is HM Land Registry's internal reference for the
application (this is only provided when the service was available, but the
application requires manual processing)
Unique message ID, the acknowledgment ID, which must be used to get the
poll response (refer to figure 3).

```
Figure 3

<!--  SOAP envelope starts -->
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">

  <!--  SOAP body starts -->
  <soapenv:Body>
    <ns3:processLCBankruptcySearchRequestResponse
xmlns:ns1="http://www.oscre.org/ns/eReg-
Final/2011/RequestLandChargesBankruptcySearchV2_0"
    xmlns:ns3="http://bankruptcyv2_0.ws.bg.lr.gov/"
    xmlns:ns4="http://www.oscre.org/ns/eReg-
Final/2011/ResponseLandChargesBankruptcySearchV2_0">
      <return>
        <ns4:GatewayResponse>
          <!--  Response type code:10 i.e Acknowledgement -->
          <ns4:TypeCode>10</ns4:TypeCode>
          <ns4:Acknowledgement>
            <ns4:AcknowledgementDetails>
              <!--  Unique message ID taken from request -->
              <ns4:UniqueID>7987dff7666s001</ns4:UniqueID>
              <!--  Expected date and time for the response to be available
-->
              <ns4:ExpectedResponseDateTime>
              2011-09-15T06:40:30</ns4:ExpectedResponseDateTime>
              <ns4:MessageDescription>Service is not currently
              available.System has queued your request,please poll
              at specified time.</ns4:MessageDescription>
            </ns4:AcknowledgementDetails>
          </ns4:Acknowledgement>
        </ns4:GatewayResponse>
      </return>
    </ns3:processLCBankruptcySearchRequestResponse>
  </soapenv:Body>
  <!--  SOAP body ends -->

</soapenv:Envelope>
<!--  SOAP envelope ends -->
```

Rejection
This error response type contains the business rules that have failed while
processing the request (refer to figure 4).

```
Figure 4

<!-- Soap Envelope starts -->
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">

  <!-- Soap Body starts -->
  <soapenv:Body>
    <ns3:processLCBankruptcySearchRequestResponse
xmlns:ns1="http://www.oscre.org/ns/eReg-
Final/2011/RequestLandChargesBankruptcySearchV2_0"
    xmlns:ns3="http://bankruptcyv2_0.ws.bg.lr.gov/"
    xmlns:ns4="http://www.oscre.org/ns/eReg-
Final/2011/ResponseLandChargesBankruptcySearchV2_0">
      <return>
        <ns4:GatewayResponse>
         <!-- Response type Code:20 i.e. Rejection -->
          <ns4:TypeCode>20</ns4:TypeCode>
          <ns4:Rejection>
            <ns4:ExternalReference>
              <ns4:Reference>Test 1.023</ns4:Reference>
            </ns4:ExternalReference>
            <ns4:RejectionResponse>
              <ns4:Reason>BatchException</ns4:Reason>
              <ns4:Code>BatchExceptionCode</ns4:Code>
             <!-- Business Rule failed -->
              <ns4:ValidationErrors>
               <!-- Language independent error code -->
                <ns4:Code>bg.fee.feeMismatch</ns4:Code>
               <!-- Language dependent description (in this case 'EN') -->
                <ns4:Description>Fee Amount provided does not match with
the fee calculated by Land Registry.</ns4:Description>
              </ns4:ValidationErrors>
            </ns4:RejectionResponse>
          </ns4:Rejection>
        </ns4:GatewayResponse>
      </return>
    </ns3:processLCBankruptcySearchRequestResponse>
  </soapenv:Body>
  <!-- Soap Body ends -->
</soapenv:Envelope>
<!-- Soap Envelope ends -->
```

Success

This normal response type contains the success result (refer to figure 5).

```
Figure 5

<!-- Soap Envelope starts -->
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">

  <!-- Soap Body starts -->
  <soapenv:Body>
    <ns3:processLCBankruptcySearchRequestResponse
xmlns:ns1="http://www.oscre.org/ns/eReg-
Final/2011/RequestLandChargesBankruptcySearchV2_0"
    xmlns:ns3="http://bankruptcyv2_0.ws.bg.lr.gov/"
    xmlns:ns4="http://www.oscre.org/ns/eReg-
Final/2011/ResponseLandChargesBankruptcySearchV2_0">
      <return>
        <ns4:GatewayResponse>
         <!-- Response type Code:30 i.e. Success -->
          <ns4:TypeCode>30</ns4:TypeCode>
             <!-- Success Results -->
          <ns4:Results>
            <ns4:ExternalReference>
              <ns4:Reference>abc12345</ns4:Reference>
            </ns4:ExternalReference>
            <ns4:HMLRReference>
              <ns4:Reference>09395D</ns4:Reference>
            </ns4:HMLRReference>
            <ns4:ActualPrice>
              <ns4:GrossPriceAmount>2.00</ns4:GrossPriceAmount>
            </ns4:ActualPrice>
            <ns4:Attachment>
              <ns4:EmbeddedFileBinaryObject ns4:format="PDF">Large byte
array here removed for space</ns4:EmbeddedFileBinaryObject>
            </ns4:Attachment>
            <ns4:ResultTypeCode>10</ns4:ResultTypeCode>
          </ns4:Results>
        </ns4:GatewayResponse>
      </return>
    </ns3:processLCBankruptcySearchRequestResponse>
  </soapenv:Body>
  <!-- Soap Body ends -->
</soapenv:Envelope>
<!-- Soap Envelope ends -->
```

7.Business Gateway services URLs

7.1 WSDL and request/response schema download links

7.1.1 WSDL

In the URLs listed below, substitute {PLACE_HOLDER} as follows:

Test Environments:
- Enquiry by Property Description, Office Copy Title Known, Official Search of Whole with Priority

https://bgtest.landregistry.gov.uk/b2b/ECBG_StubService
- eDocument Registration Service

https://bgtest.landregistry.gov.uk/b2b/ECDRS_StubService
- Online Ownership Verification Service

https://bgtest.landregistry.gov.uk/b2b/EOOV_StubService
- Local Land Charges Service

https://bgtest.landregistry.gov.uk/b2b/ECLLC_StubService
- All Other Services

https://bgtest.landregistry.gov.uk/b2b/BGStubService

Production Environments:
- eDocument Registration Service

https://businessgateway.landregistry.gov.uk/b2b/ECDRS_SoapEngine
- Online Ownership Verification Service

https://businessgateway.landregistry.gov.uk/b2b/EOOV_SoapEngine
- Local Land Charges Service

https://businessgateway.landregistry.gov.uk/b2b/ECLLC_SoapEngine
- All Other Services

https://businessgateway.landregistry.gov.uk/b2b/BGSoapEngine

7.1.2 Service endpoints and XSD schema definitions

Current links to service endpoints and XSD schema definitions be found within the WSDL file.

7.2 Information Services

7.2.1 Daylist enquiry V2.0

- `{PLACE_HOLDER}/DaylistEnquiryV2_0WebService?wsdl`

- `{PLACE_HOLDER}/DaylistEnquiryV2_0PollRequestWebService?wsdl`

7.2.2 Enquiry by property description V2.0

- `{PLACE_HOLDER}/EnquiryByPropertyDescriptionV2_0WebService?wsdl`
- `{PLACE_HOLDER}/EnquiryByPropertyDescriptionV2_0PollWebService?wsdl`

7.2.3 Land charges bankruptcy search V2.0

- `{PLACE_HOLDER}/BankruptcySearchV2_0WebService?wsdl`
- `{PLACE_HOLDER}/BankruptcySearchV2_0PollRequestWebService?wsdl`

7.2.4 Land charges bankruptcy search V2.1

- `{PLACE_HOLDER}/BankruptcySearchV2_1WebService?wsdl`
- `{PLACE_HOLDER}/BankruptcySearchV2_1PollRequestWebService?wsdl`

7.2.5 Land charges full search V2.0

- `{PLACE_HOLDER}/FullSearchV2_0WebService?wsdl`
- `{PLACE_HOLDER}/FullSearchV2_0PollRequestWebService?wsdl`

7.2.6 Land charges full search V2.1

- `{PLACE_HOLDER}/FullSearchV2_1WebService?wsdl`
- `{PLACE_HOLDER}/FullSearchV2_1PollRequestWebService?wsdl`

7.2.7 Official copy title known V2.0

- `{PLACE_HOLDER}/OfficialCopyTitleKnownV2_0WebService?wsdl`
- `{PLACE_HOLDER}/OC1TitleKnownV2_0PollRequestWebService?wsdl`

7.2.8 Official copy title known V2.1

- `{PLACE_HOLDER}/OfficialCopyTitleKnownV2_1WebService?wsdl`
- `{PLACE_HOLDER}/OC1TitleKnownV2_1PollRequestWebService?wsdl`

7.2.9 Official search of part with priority V2.0

- `{PLACE_HOLDER}/OfficialSearchOfPartV2_0WebService?wsdl`
- `{PLACE_HOLDER}/OfficialSearchOfPartV2_0PollRequestWebService?wsdl`

7.2.10 Official search of part with priority V2.1

- `{PLACE_HOLDER}/OfficialSearchOfPartV2_1WebService?wsdl`
- `{PLACE_HOLDER}/OfficialSearchOfPartV2_1PollRequestWebService?wsdl`

7.2.11 Official search of whole with priority V2.0

- `{PLACE_HOLDER}/OfficialSearchV2_0WebService?wsdl`
- `{PLACE_HOLDER}/OfficialSearchV2_0PollRequestWebService?wsdl`

7.2.12 Official search of whole with priority V2.1

- `{PLACE_HOLDER}/OfficialSearchV2_1WebService?wsdl`
- `{PLACE_HOLDER}/OfficialSearchV2_1PollRequestWebService?wsdl`

7.2.13 Register extract service V2.0

- `{PLACE_HOLDER}/OfficialCopyWithSummaryV2_0WebService?wsdl`
- `{PLACE_HOLDER}/OfficialCopyWithSummaryV2_0PollRequestWebService?wsdl`

7.2.14 Register extract service V2.1

- `{PLACE_HOLDER}/OfficialCopyWithSummaryV2_1WebService?wsdl`
- `{PLACE_HOLDER}/OfficialCopyWithSummaryV2_1PollRequestWebService?wsdl`

7.2.15 Search of the index map V2.0

- `{PLACE_HOLDER}/SearchOfIndexMapV2_0WebService?wsdl`
- `{PLACE_HOLDER}/SearchOfIndexMapV2_0PollRequestWebService?wsdl`

7.2.16 Search of the index map V2.1

- `{PLACE_HOLDER}/SearchOfIndexMapV2_1WebService?wsdl`
- `{PLACE_HOLDER}/SearchOfIndexMapV2_1PollRequestWebService?wsdl`

7.3 e-DRS

7.3.1 Application to change register V2.0

- `{PLACE_HOLDER}/EDocumentRegistrationV2_0WebService?wsdl`
- `{PLACE_HOLDER}/EDocumentRegistrationV2_0PollRequestWebService?wsdl`

7.3.2 Attachment V2.0

- `{PLACE_HOLDER}/AttachmentV2_0WebService?wsdl`
- `{PLACE_HOLDER}/AttachmentV2_0PollRequestWebService?wsdl`

7.3.3 Correspondence V1.0

- `{PLACE_HOLDER}/CorrespondenceV1_0PollRequestWebService?wsdl`

7.3.4 Early completion V2.0

- `{PLACE_HOLDER}/EarlyCompletionV2_0PollRequestWebService?wsdl`

7.3.5 Application to change register V2.1

- `{PLACE_HOLDER}/EDocumentRegistrationV2_1WebService?wsdl`
- `{PLACE_HOLDER}/EDocumentRegistrationV2_1PollRequestWebService?wsdl`

7.3.6 Attachment V2.1

- `{PLACE_HOLDER}/AttachmentV2_1WebService?wsdl`
- `{PLACE_HOLDER}/AttachmentV2_1PollRequestWebService?wsdl`

7.3.7 Correspondence V2.1

- `{PLACE_HOLDER}/CorrespondenceV2_1PollRequestWebService?wsdl`

7.3.8 Early completion V2.1

- `{PLACE_HOLDER}/EarlyCompletionV2_1PollRequestWebService?wsdl`

7.4 Verification Services

7.4.1 Online Ownership Verification V1.0

- `{PLACE HOLDER}/OnlineOwnershipVerificationV1_0WebService?wsdl`

7.5 Local Land Charges Services

7.5.1 Local land charges search V1.0

- `{PLACE HOLDER}/LLCSearchV1_0WebService?wsdl`

7.6 Outstanding Requests

7.6.1 Outstanding Requests V2.0

- `{PLACE_HOLDER}/OutstandingRequestsV2_0WebService?wsdl`

7.6.2 Outstanding Requests V2.1

- `{PLACE_HOLDER}/OutstandingRequestsV2_1WebService?wsdl`

8.0 Upgrade & Change Policy - vendor summary

The general policy for upgrading and changing Business Gateway is to introduce new web services and deprecate existing web services gracefully wherever possible; this should avoid the need for all applications to perform a hard cutover. Due to the overhead and impact of delivering new schemas HM Land Registry will endeavour to schedule a maximum of one release per year. Only where there is a major bug making a web service inoperable will a web service be replaced with immediate effect.

8.1 New web service

- Notification of the functionality and delivery schedule of a new web service will be through standard customer communication channels, combined with the new forum created for users of Business Gateway.
- All technical details will be published on the Business Gateway developer pack webpage.
- A vendor test facility will go live at the same time as or prior to the web service itself. This will include Test Stubs, Vendor Test Data, Workflows providing business rules and message outputs and Schema Validation Sheets.

8.2 Web service deprecation

- Notification of the schedule for deprecation (removal) will come from the standard customer communication channels.
- The normal deprecation of a web service will be six months from the date of notification, but this may vary in exceptional circumstances.
- All users of a service will receive a final reminder one month before the service is discontinued.
- Changes and additions to the service will be contained in the *Business Gateway Service release notes* on the Business Gateway landing page. Change details relating to the developer pack will be contained in the *Business Gateway Developer Pack release notes* referenced on the Business Gateway developer pack webpage

8.3 Emergency bug fix (minor version of the web service)

- Notification of an emergency bug fix will be through the Service Desk.
- A new version number will be incorporated into an existing web service name that is being replaced, for example Version 1.0 will become Version 1.1. In this emergency example, Version 1.0 will be withdrawn as soon as Version 1.1 becomes live.
- A new version of the vendor test facility (stub) will go live at the same time as the web service itself. Integrated vendors will be notified if and/or when they can test the change before it is put live.

8.4 Scheduled upgrade (major version of the web service)

- Notification of the changes being made in a new version of an existing web service will be from the standard customer communication channels.
- The new version will run simultaneously with the old, until the old version is deprecated, to avoid the need for all applications to perform a hard cutover.
- A new version number will be incorporated into an existing web service name that is being replaced, for example Version 1.0 (or 1.1) will become Version 2.0.
- A new version of the vendor test facility will go live at the same time as or prior to the new version of the web service.
- Change details will be contained in the Service *Business Gateway release notes* on the Business Gateway landing page.

9. Abbreviated Terms

Abbreviation	Full Name
API	Application programming interface
CMS	Case management software
HTTP	Hypertext transfer protocol
HTTPS	Hypertext transfer protocol secure
ID	Identifier
LLC	Local land charges
SOAP	Simple object access protocol
SSL	Secure sockets layer
URL	Uniform resource locator
VDD	Variable direct debit
WSDL	Web services description language
XML	Extensible markup language