

GPLS-Business Message Specification

Business switching

Version 0.9 – Draft
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1 Introduction

GPLS-B, Gaining Provider Lead Switching for Business, is a process by which business customers can switch their services from one retailer to another.

This GPLS-B message specification document complements and supports the GPL Business Process Design v1.0.0 issued April 2023.

This document provides the messaging specification and any design and development considerations for implementors to support the GPLS-B process.

The core integration elements of the Post Office and Letterbox design, API specifications, security requirements and the messaging envelope are all defined in the One Touch Switch Technical design document. This document focuses only on the One Touch Switch message formats and their use.

For a definition of the GPLS-B process, please refer to the GPL Business Industry Process design document.

1.1 Change log

Version Date Changed by	Reason for change
V0.0.1 First draft 10/03/2023 GPLS-BSG	First draft output from the GPLS-BSG (GPL Switching, Business Steering Group). First draft, specifically providing message formats for the GPLS-B process. Only issued for review within the GPLS-BSG.
V0.0.2 Updated draft 29/03/2023 GPLS-BSG	Added businessSwitchStatusRequest message to the specification for consultation.
V0.0.3 Updated draft for Internal review	Document renamed to GPLS-B Message Specification Added businessSwitchCarbonCopy message specification for consultation
V0.0.4 Updated draft for Internal review	Fixed multiple inconsistencies and spelling mistakes.

Version Date Changed by	Reason for change
V0.5 Updated draft 12/10/2023 GPLS-BPG	<p>Removed businessSwitchStatusRequest and businessSwitchCarbonCopy. Added businessSwitchNotification. Submitted for public presentation and review.</p> <p>Added businessSwitchServiceMatchRequest as a simple way to add services to an existing match request.</p> <p>Added businessSwitchNotification to provide a mechanism for CPs to contact each other regarding a switch.</p> <p>Renamed activationDate on businessSwitchOrderTriggerRequest to switchDate to remove any inference to behaviour based on the field name.</p> <p>Added name and account as explicit match entries on a businessSwitchMatchRequest as explicit match identifiers.</p> <p>Removed the addressList object from the businessSwitchMatchRequest so only one address object is now present.</p> <p>Renamed linkedSwitchOrderReference to just switchOrderReference on businessSwitchMatchRequest to be consistent with other messages.</p> <p>Defined the assetListRequest/requestedAssets property values on the businessSwitchMatchRequest.</p> <p>Added global "allServices as well as individual services to order, update, cancel and switch in the businessSwitchOrderRequest, businessSwitchOrderUpdateRequest, businessSwitchOrderCancelRequest and businessSwitchOrderTriggerRequest.</p>
V0.6 Updated draft 8/11/2023 GPLS-BPG	<p>Updated element names to stay aligned with OTS message formats for ease of compatibility</p>
V0.7 Updated for public review 5/12/2023 GPLS-BPG	<p>Minor language updates and corrections, submitted for publishing and review.</p>
V0.8 Minor update 18/1/2024 GPLS-BPG	<p>Added SecureID as an identification option for switch matches</p>
V0.9 Minor update 1/2/2024 GPLS-BPG	<p>Renamed the businessSwitchNotification message to switchNotification so that it can be used and adopted universally for residential as well as business switching (if required). Unified how documents are shared in each message type.</p>
V0.9.1 Minor Update 14/3/2024 GPLS-BPG	<p>Added SwitchingNotSupported as a response to a service match request.</p>
V0.9.2 Minor Update 26/3/2024 GPLS-BPG	<p>Corrected all example JSON correlation ID values</p>

1.2 Material changes in Message Specification v0.9.2 relative to v0.0.4

businessSwitchMatchRequest, name and account have been added as explicit entities in the root of the message the same as in OTS. addressList removed so only a single address can be presented on a match request.

LetterOfAuthority updated to create a container for the URI and allow supply of a user ID and password for access to avoid documents being available publicly without credentials.

businessSwitchServiceMatchRequest added to simplify adding services to an existing SOR.

businessSwitchMatchConfirmation, matchResult added as a container to align with OTS. SwitchAction expanded to allow ForcedCease and ServiceNotUnique as results. PartialDN added as a value returnable by the LRP if a service is listed that was not requested, for example in the event of identifying a ForcedCease based on other services switching.

businessSwitchOrderRequest, added processAllMatchedServices to allow requesting all previously matched services to be ordered without the need to list them individually. Added a default plannedSwitchDate if services are ordered but not listed explicitly. Moved the letterOfAuthority document to a dedicated object and included user id and password to control access.

businessSwitchOrderUpdateRequest, added processAllOrderedServices to allow requesting all previously matched services to be updated without the need to list them individually. Added a default plannedSwitchDate if services are ordered but not listed explicitly.

businessSwitchOrderTriggerRequest, added processAllOrderedServices to allow requesting all previously matched services to be triggered without the need to list them individually. Added a default plannedSwitchDate if services are ordered but not listed explicitly. Added activationDate to each service as an optional field.

businessSwitchOrderCancellationRequest, added processAllOrderedServices to allow requesting all previously matched services to be cancelled without the need to list them individually.

Removed the businessSwitchOrderStatusRequest, businessSwitchOrderOrderStatusReport and businessSwitchCarbonCopy as no longer required.

Added the businessSwitchNotification message as a means for CPs to communicate with each other in the event of customer originated issues or disputes.

SecureID has been added as an option for identification in match requests.

Renamed businessSwitchNotification to switchNotification to make it a universal process message and not specific to GPLS-B.

Changed the switchNotification document link to use the same mechanism as the LOA and element structure to standardise handling.

Added the response code ServiceNotSupported in the Business Switch Match Confirmation message for scenarios where a service was identified correctly by its identifier, but it not supported under the GPLB process rules for switching.

All JSON examples have been updated with appropriate and valid correlation ID information.

1.3 Contributing authors

Author	Organisation
Dave Stubbs	Virgin Media

1.4 Abbreviations and definitions

Abbreviation / term	Meaning / definition
TOTSCo	The One Touch Switching Company www.totsc.org.uk
TOTSCo Hub	This is the formal name used by TOTSCo to refer to the hub which will provide services to CPs in support of OTS and GPLS-B processes, and possibly for other industry processes in the future. TOTSCo have chosen Tech Mahindra to implement and operate the TOTSCo Hub.
CP	Communications provider This is a term defined by Ofcom in their General Conditions of Entitlement as a “means a person who provides an Electronic Communications Network or an Electronic Communications Service”.
RCP	Retail CP. This term was first defined in the OTS Industry Process (and re-used in the GPLS-B documentation) to define those CPs who provide services at the retail level to end-users, both consumer and business.
OTA2	The Office of Telecommunications Adjudicator. The OTA2 was established as a follow-on to the original OTA Scheme, and is independent of Ofcom and of industry.
POTS	Plain old telephone service, a retronym for a voice service over a twisted copper pair – see Plain old telephone service - Wikipedia
SOR	Switch order reference.
GPLS-B	Gaining Provider Lead Switching for Business
GPLS-BSG	GPLS-B Steering Group
GPLS-BPG	GPLS-B Process Group

Text in **this font** is a verbatim representation of an element or value that could appear in an OTS message.

2 Gaining Provider Lead Business Switching

Throughout the details of this document, the message formats rely heavily on a clear understanding and communication between the gaining and losing provider of exactly which services are to be switched.

Unlike the consumer One Touch Switch process which is limited to a single broadband instance and a couple of telephone lines at a single site, business switching can mean multiple services across multiple sites on multiple accounts and contracts.

The messaging processes have been designed to allow as much flexibility as necessary to support that level of complexity, while at the same time not being onerous for simpler switches to be processed.

2.1 Multi Part Switch Order Processing

Those familiar with the One Touch Switch process will realise that a single switch has a set pattern of singular events, a match, an order, and a trigger. They must occur in a set order and can only contain the defined set of services and perform the action on those services at each stage.

While that process is lightweight and applicable for consumer switching, it is too rigid to be used in a business environment, and while the high-level concepts of matching, ordering and triggering remain for consistency, the rigidity on the content has been removed to allow for a much more flexible process for business.

This is achieved principally by allowing a switch order to be created, and then allow adding of services to it, then starting the switch on some or all services over a staggered period, and then triggering the switch of those services as and when required. Matches, adds, updates, cancellations and triggers can continue to be performed against the same switch order if the SLA for the switch order is valid. Please refer to the GPLS-B process document for the definition of SLAs.

When reading this document, you will see that the services affected are listed in every message. This provides the consistency of clear communication required to perform the required actions at each stage of the business switching process.

There are also some helper functions built into the messaging as well, for example on a match request. By allowing a linked order reference to be provided by the GRCP on a switch match request, multiple matches can be combined by the losing provider into a single switch order before a switch order reference is issued.

If there are errors in part on any request, a new request can be submitted only containing the service needing correction. Those already accepted will be actioned.

The design and intent are to allow the business switching process to be flexible, but not unnecessarily complex.

2.2 Service Identification

Service identification is the key to simplification, and there are a number of identities in this document that it is important to clarify and explain before using.

2.2.1 serviceIdentifier

A service identifier is a commonly shared reference for the service that the gaining and the losing provider will both recognise. A telephone number is a good example of this as the UK has a standard format for numbers and they are unambiguous.

A service identifier could identify a single number, or could identify a range, the industry process will specify how these values will be presented.

3 Business Switching Message Formats

The following sections define the suite of messages supported for the BPLB Switching process. Each message will be documented with a brief example of the message format, a list of the message elements and their specifications and, if appropriate, their values.

3.1 Envelope-specific requirements for GPLS-B

For GPLS-B, the elements in the envelope defined for the TOTSCo hub should be populated as follows:

- The source ID should be the RCPID of the sender of the message as it appears in the list obtained from the TOTSCo hub directory.
- The destination ID should be an RCPID from the list obtained from the TOTSCo hub directory representing the required recipient.
- The source and destination types should be "RCPID".
- The source correlation ID should be a value generated by the sender of the message that would allow any response to be linked to that message.
- The destination correlation ID should only be populated when responding to a message, and should contain the correlation ID that was provided in the source information of the original message being responded to.
- The **routingID** should be the message format name.
- The **auditData** should be provided in the event of any fault message being returned and should contain the **faultCode**.

TOTSCo will use all of the above information for analytics and reporting.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "ABC123"
    },
    "routingID": "messageName",
    "auditData": [
      {
        "name": "faultCode",
        "value": "1101"
      }
    ]
  },
  "messageName": {
    ...
  }
}
```


3.2 Business Switch Match Request

A business match request defines the information identifying the customer and the services they wish to switch. The following shows the complete message format. For the switching **services** array, at least one service must be specified.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchMatchRequest"
  },
  "businessSwitchMatchRequest": {
    "grcpBrandName": "Bridgend Telecoms (Telesales)",
    "name": "The Coffee Shop",
    "account": "0003316563216",
    "identity": [{
      "type": "contact",
      "id": "John Smith"
    },
    {
      "type": "DN",
      "id": "01234987654"
    }
  ],
  "address": {
    "uprn": "12345",
    "addressLines": ["22 Cheshunt Mews"],
    "postTown": "Glasgow",
    "postCode": "SW2R 5AF"
  },
  "linkedMatchReference": "ABC00000011123",
  "switchOrderReference": "ABC46546C46546AAF65AAF65A6E6EA546A4686",
  "letterOfAuthority": {
    "signatory": "Fred Bloggs",
    "jobTitle": "CTO",
    "document": {
      "URI": "http://linktoloaddocument.com/loadoc",
      "user": "loaUser",
      "password": "xx546A65Fr"
    }
  },
  "assetListRequest": {
    "requester": "John Smith (Accounts)",
    "requestedAssets": "all"
  },
  "services": [{
    "serviceType": "IAS",
    "action": "cease"
  },
  {
    "serviceType": "NBICS",
    "serviceIdentifier": "0101111222",
    "action": "port"
  },
  {
    "serviceType": "NBICSRange",
    "serviceIdentifier": "0101112000-0101112999",
    "action": "port"
  }
  ]
}
```

The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchMatch Request	Identifies the message as being a business switch request.	Object	Required
grcpBrandName	Brand name the gaining provider wishes to be presented to the customer on the implications of switching communication sent to the existing customer.	String	Required
name	This will be either the name of the business switching, or the surname of the customer the account is held under (e.g. as often found on home office accounts).	String	Required
account	The customer account number as known to the losing provider.	String	Optional
Identity	A list of additional identity objects used to help identify the accounts and services being switched	Object of identities	Optional
Identity/ name	The name specifies the type of identity information supplied, and therefore indicates how the GRCP should process it. Valid values will be... contact which represents the name of an individual. DN which represents a directory number that isn't being switched and is not in the public domain, or immediately associated with the account. SecureID which is a value agreed with the CP to be used when identifying themselves. This could include 2FA codes, etc.	String	Required
Identity/ value	This is the value represented by the named identity.	String	Required
address	A container of the address elements	Object of address elements	Required
address/ uprn	The UPRN of the premise where the customer is switching services. A UPRN can be up to 12 digits long. For the avoidance of doubt, do not include any leading zeroes.	String	Optional
address/ addressLines	Address lines identifying the premise where the switch will take place. Must be formatted according to PAF rules, with no abbreviations. Do not include the post town, postcode or county.	String array	Required
address/ postTown	The post town of the address where service is being switched. This should be the post town as defined by Royal Mail and included in PAF and commercial products based on PAF.	String	Required
address/ postCode	The post code of the address where service is being switched. Formatted with a space between the inward and outward components.	String	Required
linkedMatchReference	A reference sent by the gaining provider to link multiple switch requests together. For a single request/simple switch, this can be omitted.	String	Optional
switchOrderReference	Specifies an existing SOR to add this request to. This can be used if more addresses, accounts or services are to be added to an existing switch order and can be using in place of the linkedSwitchOrderReference if an SOR exists already.	String	Optional
letterOfAuthority	This indicates to the losing provider that the gaining provider has a letter of authority. This value can be omitted if no LOA has been obtained.	Object	Optional

JSON element	Description	Format	Notes
letterOfAuthority/signatory	This is the name of the person that has signed the LOA	String	Required
letterOfAuthority/jobTitle	Job title of the signatory	String	Required
letterOfAuthority/document	If an electronic copy of the LOA is available for the LRCP to view, the information to access it will be provided here.	Object	Optional
document/URI	This is the URI of the document made available for the LRCP to view.	Free Text	Required
document/user	If required to access the LOA, the user ID to use	String	Optional
document/password	If required to access the LOA, the user password to use	String	Optional
assetListRequest	An instruction to request the losing provider send the requestor a list of the assets that are available for switching in accordance with the identification information presented and the assets required.	Object	Optional
assetListRequest/requester	The identification information to be included with the asset list in cases where the asset list may get sent to a department or location other than where the requester works.	String	Required
assetListRequest/requestedAssets	Identifies the nature of the assets to be returned, one of the following values are permitted. If this option is not presented then all assets shall be returned. address only list the assets associated with the address presented on this request, this will include other accounts at the same address if the LRCP has that association available. account list the assets associated with the account presented on this request, this will include services at all locations the same account. only list all of the assets associated to the one address and one account provided by the requestor regardless of how many accounts or service locations the LRCP can identify. all list all of the assets associated to all addresses and accounts associated to the requesting customer, as known to the losing provider.	String	Required
services	A container of the services requested to be switched.	Array of services Objects	Optional
service/serviceType	An industry agreed name for the service to be switched. Currently, IAS , NBICS and NBICSRange are supported.	String	Required
service/servicIdentifier	For services that cannot be identified by just presenting the service type, a servicIdentifier specifies how the losing provider will find that service this only needs to be used if an asset reference is not provided.	String	Optional
service/action	Specifies the action the losing provider is asked to take with the service specified. Valid values are cease and port .	String	Required

This message is always sent by the gaining provider.

At least two clear points of match must be made by the LRCP. The address must not cause a negative match. Match requests should be constrained to a single site, or can be provided with the head office address.

If a UPRN is presented, then as long as the postcode and post town is also a match, the losing provider can consider the address a match without having to compare the address line by line. The losing provider may do a full comparison, if more appropriate for the way they manage addresses.

In situations where multiple match requests will be sent for a business switch, for example where there are multiple sites or accounts that are all linked together, the gaining provider will provide a linkedSwitchOrderReference on each request. The losing provider will then use this and in each response use the same Switch Order Reference number so that all parts of that switch are combined into a single switching order. For an order placed without a linked order reference, that switch will be processed as a standalone transaction.

All address elements should conform with standard PAF formatting rules in the messages. When processing the request, the losing provider will ignore case sensitivity and must be aware that not all providers will format the address in the same way, some lines may be in different positions, possibly concatenated together, therefore matching is not a simple line-to-line comparison and should allow for variations in formatting.

It is a requirement that abbreviated address elements not be allowed, and that should a losing provider identify abbreviations in the address supplied by the customer they should be expanded to the full words. For example, rd. should always be road, ave. should always be avenue etc. Likewise, gaining providers must have the same consideration if their data stores address elements with abbreviations, or at least accommodate them in their address matching rules.

Each service being switched on behalf of the customer must be listed in the services object with the action required to be taken by the losing provider.

Action	Meaning
cease	Identifies that the service identified is requested to be ceased as a result of the switching activity. This can apply to IAS and NBICS.
port	Identifies that the number on an NBICS switch will be transferred ¹ to the gaining provider as part of the switching activity. It is mandatory to include the DN as the serviceIdentifier in the NBICS service block when requesting a number port, and port also implies the cessation of the voice service.

In the event of a successful match, but either no services were provided, or services were provided but not found, this would still be treated as a successful match request, but the failed services would be described in the response body.

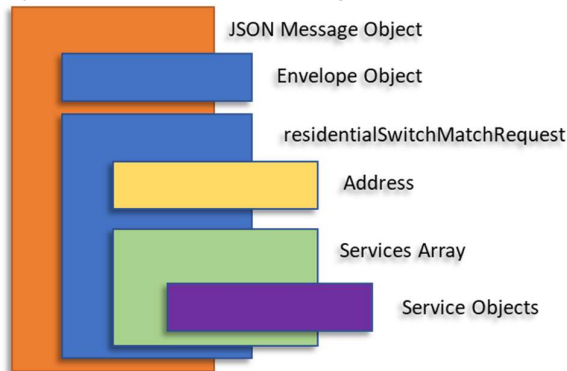
Service identifier is used primarily for voice services to identify the phone number (DN) to be switched (ported), and is not required if the voice service is to be ceased without any port of the existing number. It is optional against the IAS service in case there are any instances where such an identity would be available and prove useful to match with, otherwise, it can be ignored for that service. The LRCP should use the serviceIdentifier in an intelligent manner to match against their asset records, e.g:

- For NBICS, it is expected that most LRCPs will interpret any serviceIdentifier as being the DN of the voice service.
- In the event of a number range being required to switch, this can be specified as a single switch service identifier listing the from and to numbers with a hyphen separating them.

¹ The transfer of the number to the gaining retail provider may involve a change of voice CP (a full number port), or the GRCP may use the same VCP as the LRCP (sometimes termed a number transfer). An action of [port](#) covers all scenarios by which the customer may move their number to the GRCP.

- LRCs will be encouraged to publish the URL of a help/FAQ page, where they can document what forms of serviceIdentifier and type they will accept for IAS (and if they support anything other than DN on NBICS).

The object structure for this message is as follows.



3.2.1 Business Switch Service Match Request

For an existing switch order reference, to add services, this cut down version of the match request can be used to add services to an existing SOR.

As no further matching is required once an SOR has been issued, this request can be simply used to add services to the existing SOR, for example after requesting an asset list. The replies to this message will still use the standard businessSwitchMatchConfirmation and businessSwitchMatchFailure messages.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchServiceMatchRequest"
  },
  "businessSwitchServiceMatchRequest": {
    "switchOrderReference": "ABC46546C46546AAF65AAF65A6E6EA546A4686",
    "letterOfAuthority": {
      "signatory": "Fred Bloggs",
      "jobTitle": "CTO",
      "document": {
        "URI": "http://linktoloaddocument.com/loadoc",
        "user": "loaUser",
        "password": "xx546A65Fr"
      }
    }
  },
  "services": [
    {
      "serviceType": "IAS",
      "serviceIdentifier": "ABC123",
      "action": "cease"
    },
    {
      "serviceType": "NBICS",
      "serviceIdentifier": "0101111222",
      "action": "port"
    },
    {
      "serviceType": "NBICSRange",
      "serviceIdentifier": "0101112000-0101112999",
      "action": "port"
    }
  ]
}
```

The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchServiceMatchRequest	Identifies the message as being a business switch request.	Object	Required
switchOrderReference	Specifies an existing SOR to add this request to. This can be used if more addresses, accounts or services are to be added to an existing switch order and can be using in place of the linkedSwitchOrderReference if an SOR exists already.	String	Optional
letterOfAuthority	This indicates to the losing provider that the gaining provider has a letter of authority. This value can be omitted if no LOA has been obtained.	Object	Optional
letterOfAuthority/signatory	This is the name of the person that has signed the LOA	String	Required
letterOfAuthority/jobTitle	Job title of the signatory	String	Required
letterOfAuthority/document	If an electronic copy of the LOA is available for the LRCP to view, the information to access it will be provided here.	Object	Optional
document/URI	This is the URI of the document made available for the LRCP to view.	String	Required
document/user	If required to access the LOA, the user ID to use	String	Optional
document/password	If required to access the LOA, the user password to use	String	Optional
letterOfAuthority/URI	If there is a letter of authority and it can be made available electronically for the LRCP to view, then the link will be provided here.	String	Optional
services	A container of the services requested to be switched.	Array of services Objects	Optional
service/serviceType	An industry agreed name for the service to be switched. Currently, IAS , NBICS and NBICSRange are supported.	String	Required
service/serviceIdentifier	For services that cannot be identified by just presenting the service type, a serviceIdentifier specifies how the losing provider will find that service this only needs to be used if an asset reference is not provided.	String	Optional
service/action	Specifies the action the losing provider is asked to take with the service specified. Valid values are cease and port .	String	Required

This message is always sent by the gaining provider.

Each service being switched on behalf of the customer must be listed in the services object with the action required to be taken by the losing provider.

Action	Meaning
cease	Identifies that the service identified is requested to be ceased as a result of the switching activity. This can apply to IAS and NBICS .
port	Identifies that the number on an NBICS switch will be transferred ² to the gaining provider as part of the switching activity. It is mandatory to include the DN as the serviceIdentifier in the NBICS service block when requesting a number port, and port also implies the cessation of the voice service.

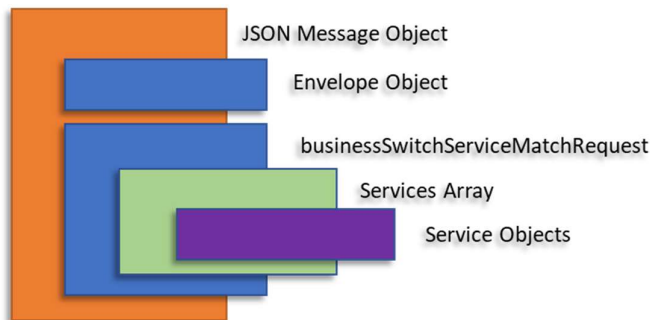
² The transfer of the number to the gaining retail provider may involve a change of voice CP (a full number port), or the GRCP may use the same VCP as the LRCP (sometimes termed a number transfer). An action of [port](#) covers all scenarios by which the customer may move their number to the GRCP.

At least one service must be listed in a request with either **cease** or **port** to constitute a valid switch request.

serviceIdentifier is used primarily for voice services to identify the phone number (DN) to be switched (ported), and is not required if the voice service is to be ceased without any port of the existing number if there is only a single DN on the account being switched. It is optional against the **IAS** service in case there are any instances where such an identity would be available and prove useful to match with, otherwise, it can be ignored for that service. The LRCP should use the **serviceIdentifier** in an intelligent manner to match against their asset records, e.g:

- For **NBICS**, it is expected that most LRCPs will interpret any **serviceIdentifier** as being the **DN** of the voice service.
- In the event of a number range being required to switch, this can be specified as a single switch service identifier listing the from and to number with a hyphen separating them.
- LRCPs will be encouraged to publish the URL of a help/FAQ page, where they can document what forms of **serviceIdentifier** and **type** they will accept for IAS (and if they support anything other than **DN** on **NBICS**).

The object structure for this message is as follows.



3.2.2 Business Switch Match Confirmation

Below is an example of a successful switch match response (not related to the previous matching example). This message is only ever sent by the losing provider.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchMatchConfirmation"
  },
  "businessSwitchMatchConfirmation": {
    "inimplicationsSent": [
      {
        "sentMethod": "email",
        "sentTo": "d***@my-domain.com",
        "sentBy": "2022-09-25 09:10:00"
      },
      {
        "sentMethod": "2nd class post",
        "sentBy": "2022-09-26 10:00:00"
      }
    ],
    "assetListSent": [
      {
        "sentMethod": "email",
        "sentTo": "d***@my-domain.com",

```


JSON element	Description	Format	Notes
linkedMatchReference	This is a simple reflection back of the linked match reference provided by the GRCP to allow them to process the response effectively. It will be omitted if one was not provided.	String	Optional
implicationsSent	A container of the information sent methods..	Array of implications Objects	Optional
implicationsSent/sentMethod	Specifies how information has/will be sent to the customer. Current supported values are email , sms , 1st class post , 2nd class post and verbally . The LRCP must specify at least one method, and may specify a list of methods. not-sent can be used to indicate no communications will be sent to the customer.	Object of methods	Required
implicationsSent/sentTo	If the information were sent by email, this property contains an obfuscated copy of the email address. The domain should be fully visible to aid the customer to identify the email hosting provider the email went to. It is recommended to mask all but 2 characters of the email address. If the addressee is 4 or 5 characters, then all but 1 character must be masked, and if the addressee is less than 4 characters then all characters of the addressee must be obfuscated. For example... ***@hotmail.com d***@hotmail.com d****@hotmail.com d*****e@hotmail.com d*****y@hotmail.com (Note that the above rules are proposed to replace the rules documented in v4.1 of the Industry Process when it is next updated.) If the information were sent by SMS, see the Industry Process for the obfuscation rules.	String	Optional
implicationsSent/sentBy	Specifies the expected date and time the information will be sent to the customer. The time element may an actual time of dispatch (e.g. for an automatically generated email), or an estimated completion time (e.g. end of batch time for generation of letters), or an end of SLA (e.g. for manually generated email / letter). Formatted as CCYYMMDD hh:mm:ss	String	Required
assetListSent	A container of the asset list sent methods..	Array of asset list Objects	Optional
assetListSent/sentMethod	Specifies how the asset list has been sent to the customer. Current supported values are "email", "1st class post" and "2nd class post". The LRCP must specify at least one method, and may specify a list of methods.	Object of methods	Required

JSON element	Description	Format	Notes
assetListSent/sentTo	<p>If the asset list were sent by email, this property contains an obfuscated copy of the email address. The domain should be fully visible to aid the customer to identify the email hosting provider the email went to. It is recommended to mask all but 2 characters of the email address. If the addressee is 4 or 5 characters, then all but 1 character must be masked, and if the addressee is less than 4 characters then all characters of the addressee must be obfuscated. For example...</p> <p>***@hotmail.com d***@hotmail.com d****@hotmail.com d*****e@hotmail.com d*****y@hotmail.com</p>	String	Optional
assetListSent/sentBy	<p>Specifies the expected date and time the asset list will be sent to the customer. The time element may an actual time of dispatch (e.g. for an automatically generated email), or an estimated completion time (e.g. end of batch time for generation of letters), or an end of SLA (e.g. for manually generated email / letter). Formatted as CCYYMMDD hh:mm:ss</p>	String	Required
matchResult	A container of the services requested to be switched.	Container Object of the match result	Required
services	A container of the services requested to be switched.	Array of service Objects	Optional
service/ serviceType	An industry agreed name for the service to be switched. Currently, IAS and NBICS are supported.	String	Required
service/ serviceIdentifier	This is reflecting back the value passed to provide clear confirmation that a specific service was matched and associated to that reference. If no value was passed, this value will be populated by a value the LRCP will expect on all further messages to refer to this service.	String	Required
service/ switchAction	Either the action the losing provider will take when the switch is performed, or information to the gaining provider about whether the service matched, or not. Please see the definition table for a list of values and their meanings.	String	Required
service/ serviceIdentifiers	A list of name and value pairs which the gaining provider can use to identify if an intra-network switch is feasible, and if so, ensure that the correct asset (copper line, full-fibre service) is switched.	Array of service identifier objects	Optional

JSON element	Description	Format	Notes
service/ identifierType	<p>For a provided service, the identifier type specifies the nature of that identifier. The type should make sense to a GRCP who use the same networkOperator as the LRCP.</p> <p>For NBICS, DN will be used where the gaining provider had previously supplied the full DN. If the gaining provider had not previously fully identified that service, then PartialDN will be used and a masked copy of the DN will be returned in the identifier. (Openreach’s MLPA service exposes an XML tag also called PartialDN for a WLR line belonging to a different CP. All RCPs can return PartialDN where appropriate, even if the voice service is not an Openreach WLR service.)</p> <p>In the case of a switch of a number range, the start and end numbers will be individually listed with the types being “DN-From” and “DN-To”.</p> <p>For IAS an identity is not required but must be provided to assist with switching on some networks, e.g. intra Openreach..</p>	String	Required
service/ identifier	A value which makes sense in the context of the identifierType.	String	Required
service/ fault	In the event of a failure to identify a service, the details will be contained in this object	Object	Optional
fault/ faultCode	An error code defining the nature of the error found processing the match request	String	Required
fault/ faultText	A human-readable description of the fault code	String	Optional

A successful match response contains the details of how and when the implications of switching have been sent to the customer (or the SLA for when they will be sent) and the details of the match concerning the services they have provided.

If a match request was made for multiple services, at least one but not all were found, then the match response will list all the services in the request, identifying which were found and which were not found. The gaining provider can then use this information to either obtain the correct information from the customer or determine if they have the correct provider. The gaining provider can resubmit the request for the incorrect services referencing the Switch Order Reference returned on this response to add the extra services without having to submit all those that had previously matched again.

For each service identified, information about that service will be provided so that the gaining provider can verify the type of switch being performed, especially if they are switching on the same network as this may affect the type of order they may need to raise.

serviceIdentifiers are optional for IAS, but within specific industry segments, for example for Openreach CPs, this information would be required to assist in creating the appropriate order types targeting the correct asset (copper line or full-fibre service). For voice lines, the **serviceIdentifiers** must be returned if the voice service

has a physical line (e.g. WLR)³, but can be omitted on a VoIP service where the customer has not provided the existing DN⁴.

A successful match to a switching request will return a switch order reference that represents the services requested to be switched that were found.

Many values can be returned for the **switchAction** attribute as follows:

Value	Meaning
ServiceFound	The LRCP has found this service for the matched customer. This is a positive result, and the GRCP may raise a switch order asking for this service to be ceased.
ServiceWithAnotherRCP	In the Openreach world, WLR and broadband can be provided over a single copper pair, but via different CPs (e.g. WLR with Post Office ⁵ , and FTTC with Zen). Post Office can use Openreach’s EMLC service to check if there is any broadband on their WLR line – if so, Post Office would return this value against the IAS. If EMLC returned no broadband, Post Office would return ServiceNotFound (or omit IAS if not included in the match request). Zen should be aware that FTTC requires an underlying WLR service, and would return this value against the NBICS. However if Zen had SOGEA broadband, there would be no WLR service. It is feasible that other networks may have similar concepts (and it may be that only Openreach has these complex patterns).
ServiceWithAnotherCust	Although rare, it is feasible that WLR and broadband are on different billing accounts, both with the same RCP. The customer(s) owning those billing accounts may be the same person, two different people, or the CRM data is not good enough to tell which. This value represents that the LRCP has found this service, but it is recorded against a different customer / billing account (not the matched customer / billing account). The GRCP may try a second match, for the same LRCP, but using different customer / account details.
ServiceNotFound	The LRCP has not found this service. The overall match may be positive with a SOR (e.g. broadband has been found, but the voice has not).
ForcedCease	The LRCP has identified a service that was not requested to be ceased but will be automatically ceased if the switch is progressed with the services that have matched. For example, switching a WLR voice line to another network provider would result in the forced cessation of an IAS service provided over the same copper line; switching a SOGEA or FTTP broadband service would result in the forced cessation of a VoIP service linked to that broadband.
ServiceAlreadySwitching	This indicates that the service has matched, but that the service is already on a switch order. That order may be from the same gaining CP on a different match order, or from a completely different CP.
ServiceNotUnique	This indicates more than one service matched the information provided and that a unique service identifier is needed to correctly match the specified service.
SwitchingNotSupported	The service specified has been found, but is currently not supported to switch using the GPLB switching processes.

³ Where the broadband is provided over the same copper line as the WLR, the **serviceIdentifiers** returned on IAS and NBICS will be identical.

⁴ If the customer did not provide the DN, we do not want the LRCP to expose the DN (as this could be mis-used as a reverse lookup). It is not necessary to return the DN to proceed with a switch that ceases VoIP service.

⁵ The Post Office telecoms business has been purchased by Shell Energy Broadband, but this was a real example and is hard to replace with a current example.

The customer must be clearly identified to constitute a valid match confirmation, even if no services are specified or none of the specified services match. This allows switch orders to be built up through use of asset lists or corrective match requests instead of trying to create a single large 100 percent correct match request up front which would be difficult to achieve with complex customers.

If a service has already been requested on the same Switch Order, then ServiceFound would be the appropriate response.

If the LRCP returns either [ServiceWithAnotherRCP](#) or [ServiceWithAnotherCust](#), the GRCP must advise the customer that there are potential additional impacts. These values can be returned either for a service which was explicitly requested to be ceased or ported, or for a service that was not requested, but is linked technically to the requested service.

The LRCP should also return the network operator of the service with another RCP or customer – e.g. in all the examples given, the network operator is [A001](#), which represents Openreach.

The GRCP may ask the customer if they are aware of having services on multiple billing accounts or across multiple RCPs. If the customer is aware, they may be able to provide information for a second match, specifying either a different LRCP, or different customer / account details. If this second match is successful, the GRCP would have enough information to gain the customer’s express consent to all the impacts of switching, and to proceed with multiple switches.

A GRCP may also proceed with a single switch, but must ensure that their systems designers fully understand the combinations, and could defend their decisions to Ofcom. E.g.

- An inter network switch of only IAS could proceed if the NBICS was provided by Openreach as WLR (inferred from the combination of [A001](#) for Openreach and [PartialDN⁶](#)) – the WLR service with the other RCP or customer could survive the loss of broadband.
- However a port out of a WLR number would mean the forced cessation of any broadband service on the copper line – so this could not proceed without a double match and express customer consent to the double cessation.

GRCPs may decide that these rules are too complex and risky, and if the customer cannot provide valid information for a successful second match, the GRCP would not proceed with a switch based on a single match that returned either of these [ServiceWithAnother...](#) values.

If a GRCP performs a match request, and only some of the services matched, perhaps the customer had mistyped a DN, then by using the linkedSwitchOrderReference another match request can be submitted for the same site with only the corrected services included and if they match on that request they will be added to the overall switch order. This avoids rejecting the whole order because some items were not found, but adds an amend function effectively to add new services.

Identifier Types for NBICS

identifierType	Description and example
NetworkOperator	An identifier for the operator of the network on which the service is provided. To be used to assist in helping the gaining provider determine the ordering processes necessary to switch services. RIDs are 3 alpha chars, RCPIDs are 4 alpha chars. Network operators will be identified by A and 3 numbers, e.g. A001 . “A” should be memorable as “Access Provider”, and for clarity RCPIDs will not start with A.

⁶ If the NBICS was MPF, the MPF operator would return an Openreach ServiceId for the MPF service. Additionally any broadband on an MPF line has to be with the same MPF CP (and probably on the same customer billing account).

identifierType	Description and example
	<p>E.g. if the NBICS is found as WLR, the network operator would be A001 – the value assigned to Openreach.</p> <p>If the NBICS is found as VoIP service, the network operator can be returned as A000, or may be returned as a value representing the VoIP network operator, where it helps the community of RCPs using that network operator to arrange intra-network number transfers.</p>
DN	The UK formatted number is expressed in all digits without spaces. For example 01213339999.
DN-From	In the event a number range has been requested, or a number in a number range, then this value represents the start number in that range that was found.
DN-To	In the event a number range has been requested, or a number in a number range, then this value represents the end number in that range that was found.
PartialDN	The UK formatted number is masked so only the final 2 digits are identifiable. For example 99. PartialDN is an XML tag used by Openreach. All RCPs can return PartialDN where appropriate, even if the voice service is not an Openreach WLR service – e.g. they have found a second voice service, and the partial DN might help the customer to understand which service has been found, without exposing the full DN.
CUPID	<p>Where the requested action was port, the LRCP should return the CUPID of the current voice provider. This can be used by the GRCP in conjunction with their supply chain to determine the lead time for porting (e.g. do all parties support OTS porting).</p> <p>It is expected that all RCPs will either know the CUPID, or will make a real-time call to their supply chain to obtain the CUPID.</p> <p>Even if port is not specified, if the CUPID is known it should be returned so that the GRCP could raise a subsequent port request without having to amend the match request.</p>

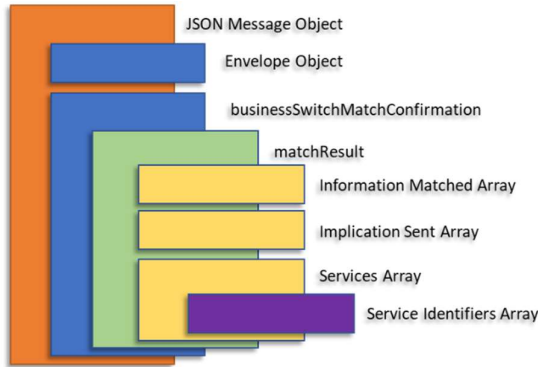
Identifier Types for IAS

identifierType	Description and example
NetworkOperator	<p>An identifier for the operator of the network on which the service is provided. To be used to assist in helping the gaining provider determine the ordering processes necessary to switch services.</p> <p>Network operators will be identified by A and 3 numbers, e.g. A001. “A” should be memorable as “Access Provider”.</p>
DN	For NBICS, if a DN had been provided in the matching request, the response may also contain that full DN
PartialDN	In scenarios such as broadband over a copper line also used for WLR, the PartialDN of the WLR will also be returned as the serviceIdentifier for the IAS.
ServiceInformation	<p>In the event a customer has more than one IAS instance at the same address under the same account number, then this identifier can be supplied with a plain text value that is human-readable and useful to the customer in clearly identifying the service instance. This could contain the product/speed, the install date, the install location etc. E.g:</p> <p>“1GB, Installed 25th September 2022 (Garage)”</p>

The above values of **identifierType** are the generic values that can be used by all RCPs.

Appendix 10 of the OTS Industry Process defines a set of **additional** values to be used by LRCPs where the current service(s) are provided on the Openreach network ([AccessLineId](#), [ONTReference](#) and [PortNumber](#)). Other access providers may define their own sets, e.g. where they support intra-network switches.

The object structure for this message is as follows.



3.2.3 Business Switch Match Failure

If the losing provider fails to make a match, the resulting message will represent this through a fault code and description.

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchMatchFailure",
    "auditData": [
      {
        "name": "faultCode",
        "value": "1103"
      }
    ]
  },
  "businessSwitchMatchFailure": {
    "faultCode": "1103",
    "faultText": "Account not found"
  }
}

```

The elements of the JSON are defined below:

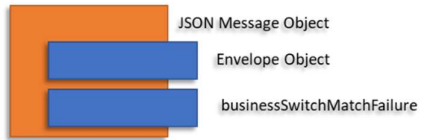
JSON element	Description	Format	Notes
businessSwitch MatchFailure	Identifies the message as being a business switch request failure.	Object	Required
faultCode	A code defining the nature of the fault found processing the match request	String	Required
faultText	A human-readable description of the fault code	String	Required

This message is returned in response to a switch request where a customer match was not determined.

If any individual element fails to process, unrecognised or invalid values, then the fault should report them as well to assist in diagnostics.

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The object structure for this message is as follows.



3.2.3.1 *Response Codes*

See the separate “GPLS-B Response Codes” spreadsheet for the list of response codes the losing provider will generate in the event of an error processing a message.

3.3 Business Switch Order Request

At the point a GRCP has approval from a customer to begin switching, the gaining provider will send a business switch order message to signal that the customer has given their express consent to go ahead with this switch, and including the SOR which is to be progressed.

It is not a requirement for the order to contain all services that have previously been matched, only those for which switching is to begin need to be presented, and subsequent order messages can be sent for other services as and when the customer wishes to progress with the switch of those.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchOrderRequest"
  },
  "businessSwitchOrderRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "plannedSwitchDate": "2023-04-03",
    "processAllMatchedServices": "yes"
  }
}
```

Alternate:

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchOrderRequest"
  },
  "businessSwitchOrderRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "plannedSwitchDate": "2023-04-03",
    "processAllMatchedServices": "no",
    "letterOfAuthority": {
      "signatory": "Fred Bloggs",
      "jobTitle": "CTO",
      "document": {
        "URI": "http://linktoloaddocument.com/loadoc",
        "user": "loaUser",
        "password": "xx546A65Fr"
      }
    }
  },
  "services": [
    {
      "serviceType": "IAS",
      "serviceIdentifier": "ABC123"
    },
    {
      "serviceType": "NBICS",
      "serviceIdentifier": "0101111222"
    },
    {
      "serviceType": "NBICSRange",
      "serviceIdentifier": "0101112000-0101112999",
      "plannedSwitchDate": "2023-05-27"
    }
  ]
}
```

The services on the switch order request can be omitted and all pending matches will be automatically progressed to order. This makes the process simpler to implement in situations such as small business switches where everything will be switched at once.

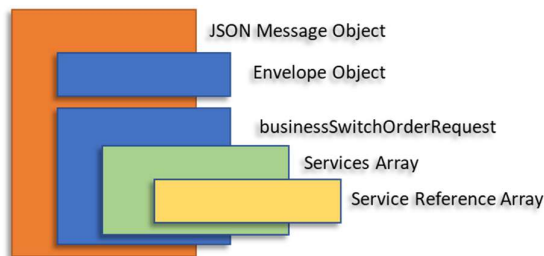
The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrder Request	Identifies the message as being a business switch order.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
plannedSwitchDate	The planned switch date represents when the gaining provider expects to deliver service to the customer and is encoded in the format CCYY-MM-DD. At the header level of this message, this refers to any services where no planned switch date have been specified, including any unlisted services requested. It will only be overridden if a specific service is listed with its own plannedSwitchDate.	String	Required
letterOfAuthority	This indicates to the losing provider that the gaining provider has a letter of authority. This value can be omitted if no LOA has been obtained or required to be presented.	Object	Optional
processAllMatchedServices	Valid values are yes or no . If set to yes, any matched service not yet ordered will be considered ordered by the LRCP. Only list individual services in this request if they have a different planned date. If no is specified, then the services must be presented individually in this request.	String	Optional (defaults to no)
letterOfAuthority/signatory	This is the name of the person that has signed the LOA	String	Required
letterOfAuthority/jobTitle	Job title of the signatory	String	Required
letterOfAuthority/document	If an electronic copy of the LOA is available for the LRCP to view, the information to access it will be provided here.	Object	Optional
document/URI	This is the URI of the document made available for the LRCP to view.	String	Required
document/user	If required to access the LOA, the user ID to use	String	Optional
document/password	If required to access the LOA, the user password to use	String	Optional
letterOfAuthority/URI	If there is a letter of authority and it can be made available electronically for the LRCP to view, then the link will be provided here.	Free Text	Optional
services	A container of the services requested to be switched.	Array of services Objects	Optional
service/identifierType	The service type provided by the gaining provider to be switched	String	Required
service/servicIdentifier	The reference provided by the gaining provider to be switched	String	Required
services/plannedSwitchDate	The planned switch date represents when the gaining provider expects to deliver service to the customer and is encoded in the format CCYY-MM-DD.	String	Optional

The message presents the switch order reference related to the switching option the customer has given consent to.

The request must either include services to be switched, or the option to processUnlistedServices must be set to [yes](#). A combination of these values is also permitted if required.

The object structure for this message is as follows.



3.3.1 Business Switch Order Confirmation

In response to a valid business switch order, the losing provider will reply with a business switch order confirmation.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderConfirmation"
  },
  "businessSwitchOrderConfirmation": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "services": [
      {
        "serviceType": "IAS",
        "serviceIdentifier": "ABC123",
        "status": "confirmed"
      },
      {
        "serviceType": "NBICS",
        "serviceIdentifier": "0101111222",
        "status": "confirmed"
      },
      {
        "serviceType": "NBICSRange",
        "serviceIdentifier": "0101112000-0101112999",
        "status": "rejected",
        "fault": {
          "faultCode": "1229",
          "faultText": "invalid or missing service identifier"
        }
      }
    ]
  }
}
```

The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrderConfirmation	Identifies the message as being a business switch order confirmation.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
services	A container of the services requested to be switched.	Array of service Objects	Optional

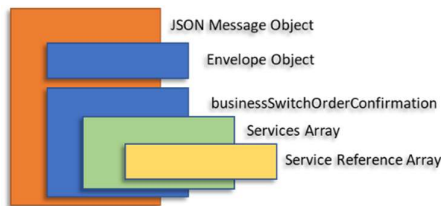
JSON element	Description	Format	Notes
service/ identifierType	The service type provided by the gaining provider to be switched	String	Required
service/ serviceIdentifier	The reference provided by the gaining provider to be switched	String	Required
service/ status	The status allows the losing provider to confirm the new state of the specific service in the switching request. Valid values are confirmed meaning the service was ordered successfully, or rejected indicating there was problem with the service and the fault block will specify the reason.	String	Required
service/ fault	In the event of a failure to identify a service, the details will be contained in this object	fault Object	Optional
fault/ faultCode	An error code defining the nature of the error found processing the order request	String	Required
fault/ faultText	A human-readable description of the fault code	String	Required

The message confirms to the gaining provider that the losing provider has received the order, it is valid and those validated services that can be ceased when triggered, or if there is an issue with the requested service.

The losing provider lists all services affected by the update, including those specifically requested as well as any found if the option to **processUnlistedServices** is set to **yes**.

Note that the **serviceIdentifier** is required for every service, even if one was not originally used on the match request. This is because the value must have been allocated for every service by the LRCP uniquely for the switch order, and avoids any confusion between services. The values will have been returned on the **businessSwitchMatchConfirmation**.

The object structure for this message is as follows.



3.3.2 Business Switch Order Failure

If the requested switch order reference cannot be found or the services can no longer be switched⁷, then the failure message will be returned.

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderFailure",
    "auditData": [

```

⁷ E.g. the services were active when the SOR was generated, but have been ceased since then (e.g. ceased for non payment), and the GRCP attempts a switch order using the SOR.

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```
{
  {
    "name": "faultCode",
    "value": "1201"
  }
],
"businessSwitchOrderFailure": {
  "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
  "faultCode": "1201",
  "faultText": "Invalid or missing switch order reference"
}
}
```

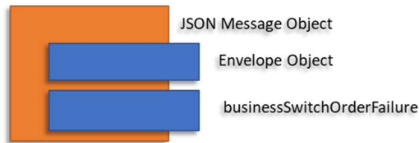
The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrderFailure	Identifies the message as being a business switch order failure.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
faultCode	A code defining the nature of the fault found processing the order request	String	Required
faultText	A human-readable description of the fault code	String	Required

The message contains a fault code and description.

If any individual element results in a failure to process or finds unrecognised or invalid values, then the fault should report them as well to assist in diagnostics.

The object structure for this message is as follows.



3.3.2.1 Response Codes

See the separate “GPLS-B Response Codes” spreadsheet for the list of response codes the losing provider will generate in the event of an error processing a message.

3.4 Business Switch Order Update Request

If a gaining provider is taking longer to deliver service and the switch order could expire, then they should notify the losing provider by updating the planned switch date. Please refer to the GPLS-B Process Design document for when to send this message.

It is not a requirement for the order to contain all services that have previously been matched, only those for which an updated date need to be provided. This message can be sent as often as required within the defined SLA for GPLS-B.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchOrderUpdateRequest"
  },
  "businessSwitchOrderRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "plannedSwitchDate": "2023-04-03",
    "processAllOrderedServices": "yes"
  }
}
```

Alternate:

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": " businessSwitchOrderUpdateRequest "
  },
  "businessSwitchOrderRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "plannedSwitchDate": "2023-04-03",
    "processAllOrderedServices": "no",
    "services": [{
      "serviceType": "IAS",
      "serviceIdentifier": "ABC123",
    }, {
      "serviceType": "NBICS",
      "serviceIdentifier": "0101111222",
    }, {
      "serviceType": "NBICSRange",
      "serviceIdentifier": "0101112000-0101112999",
      "plannedSwitchDate": "2023-05-27"
    }
  ]
}
```

The elements of the JSON are defined below:

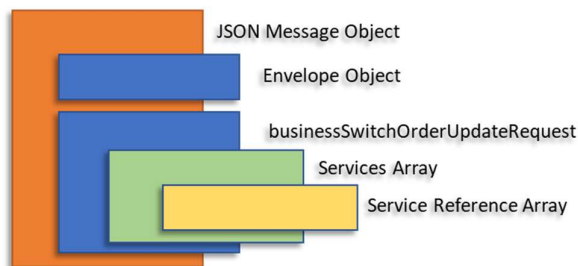
JSON element	Description	Format	Notes
businessSwitchOrderUpdateRequest	Identifies the message as being a business switch order update.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required

JSON element	Description	Format	Notes
plannedSwitchDate	The planned switch date represents when the gaining provider expects to deliver service to the customer and is encoded in the format CCYY-MM-DD. At the header level of this message, this refers to any services where no planned switch date have been specified, including any unlisted services requested. It will only be overridden if a specific service is listed with its own plannedSwitchDate.	String	Required
processAllOrderedServices	Valid values are yes or no . If set to yes, any ordered service not yet triggered will be considered updated by the LRCP. Only list individual services in this request if they have a different planned date. If no is specified, then the services must be presented individually in this request.	String	Optional (defaults to no)
services	A container of the services requested to be updated.	Array of services Objects	Optional
service/ identifierType	The service type provided by the gaining provider to be switched	String	Required
service/ serviceIdentifier	The reference provided by the gaining provider to be switched	String	Required
services/ plannedSwitchDate	The planned switch date represents when the gaining provider expects to deliver service to the customer and is encoded in the format CCYY-MM-DD.	String	Optional

The message presents the switch order reference related to the switching option the customer has given consent to.

The request must either include services to be updated, or the option to processUnlistedServices must be set to **yes**. A combination of these values is also permitted if required.

The object structure for this message is as follows.



3.4.1 Business Switch Order Update Confirmation

In response to a valid business switch order update, the losing provider will reply with a business switch order update confirmation.

Each service requested to update is individually validated, and even though this is a confirmation request, it may indicate some or all of the services have failed to be identified for updating.

Each service will either contain a response with a status indicating that the service has been confirmed to update, or a fault code and text describing why that service could not be confirmed.

The gaining provider should not take the receipt of the confirmation message as meaning all updates have been confirmed, and should instead inspect every requested service to find out if each has been accepted.

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderUpdateConfirmation"
  },
  "businessSwitchOrderUpdateConfirmation": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "services": [
      {
        "serviceType": "IAS",
        "serviceIdentifier": "ABC123",
        "status": "updated"
      },
      {
        "serviceType": "NBICS",
        "serviceIdentifier": "0101111222",
        "status": "updated"
      },
      {
        "serviceType": "NBICSRange",
        "serviceIdentifier": "0101112000-0101112999",
        "status": "rejected",
        "fault": {
          "faultCode": "1329",
          "faultText": "invalid or missing service reference"
        }
      }
    ]
  }
}

```

The elements of the JSON are defined below:

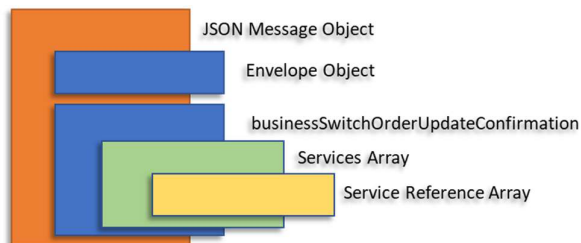
JSON element	Description	Format	Notes
businessSwitchOrder UpdateConfirmation	Identifies the message as being a business switch order update confirmation.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
services	A container of the services requested to be updated.	Array of service Objects	Optional
service/ identifierType	The service type provided by the gaining provider to be switched	String	Required
service/ serviceIdentifier	This is the gaining providers switching reference for the service to be switched.	String	Required
service/ status	The status allows the losing provider to confirm the new state of the switching request. The value will be updated if successful or rejected If the service could not be found or updated and an appropriate fault block will be provided with an explanation of the reason why.	String	Optional
service/ fault	In the event of a failure to identify a service, the details will be contained in this object	Object	Optional
fault/ faultCode	An error code defining the nature of the error found processing the requested service update	String	Required
fault/ faultText	A human-readable description of the fault code	String	Required

The message confirms to the gaining provider that the losing provider has received the update order, it is still valid and those validated services can be ceased when triggered, or indicates if there is an issue with the requested service or new date.

Note that the service reference is used, this is because the value has been allocated for every service by the GRCP uniquely for the switch order, and avoids any confusion between asset IDs or service identifiers.

The losing provider lists all services affected by the update, including those specifically requested as well as any found if the option to [processUnlistedServices](#) is set to [yes](#).

The object structure for this message is as follows.



3.4.2 Business Switch Order Update Failure

If the requested switch order reference cannot be found, or is already fully complete or cancelled, then the failure message will be returned.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderUpdateFailure",
    "auditData": [
      {
        "name": "faultCode",
        "value": "1301"
      }
    ]
  },
  "businessSwitchOrderUpdateFailure": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "faultCode": "1301",
    "faultText": "Invalid or missing switch order reference"
  }
}
```

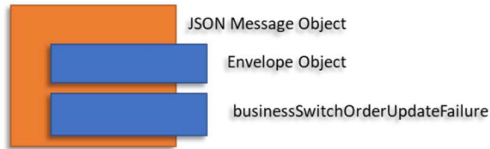
The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrderUpdateFailure	Identifies the message as being a business switch order update failure.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
faultCode	A code defining the nature of the fault found processing the match request	String	Required
faultText	A human-readable description of the fault code	String	Required

The message contains a fault code and description.

If any individual element results in a failure to process or finds unrecognised or invalid values, then the fault should report them as well to assist in diagnostics.

The object structure for this message is as follows.



3.4.2.1 Response Codes

See the separate “GPLS-B Response Codes” spreadsheet for the list of response codes the losing provider will generate in the event of an error processing a message.

3.5 Business Switch Order Trigger Request

At the point a GRCP has completed the provision of service, they will inform the losing provider by issuing the business switch completion message specifying the services to be ceased.

Again, this message follows the same process as in the switch order and update messages. It is not a requirement for the order trigger to contain all services that have previously been matched, only those for which switching is to be finalised need to be presented, and subsequent trigger messages can be sent for other services as and when the customer wishes to progress with the switch of those.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchOrderTriggerRequest"
  },
  "businessSwitchOrderTriggerRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "activationDate": "2023-04-03",
    "processAllOrderedServices": "yes"
  }
}
```

Alternate:

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchOrderTriggerRequest"
  },
  "businessSwitchOrderTriggerRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "activationDate": "2023-04-03",
    "processAllOrderedServices": "no",
    "services": [{
      "serviceType": "IAS",
      "serviceIdentifier": "ABC123",
    }, {
      "serviceType": "NBICS",
      "serviceIdentifier": "0101111222",
    }, {
      "serviceType": "NBICSRange",
      "serviceIdentifier": "0101112000-0101112999",
      "activationDate": "2023-05-27"
    }
  ]
}
```

The elements of the JSON are defined below:

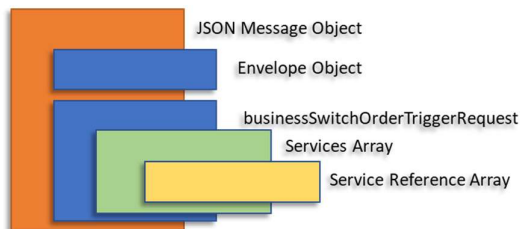
JSON element	Description	Format	Notes
businessSwitchOrderTriggerRequest	Identifies the message as being a business switch order trigger.	Object	Required
switchOrderReference	The switch order reference to be triggered.	String	Required

JSON element	Description	Format	Notes
activationDate	The date that the GRCP started to provide services to the customer. The LRCP’s billing should stop on this date. It is encoded in the format CCYY-MM-DD.	String	Required
processAllOrderedServices	Valid values are yes or no . If set to yes, any ordered service not yet triggered will be considered triggered by the LRCP. Only list individual services in this request if they have a different activation date. If no is specified, then the services must be presented individually in this request.	String	Optional (defaults to no)
services	A container of the services requested to be triggered.	Array of services Objects	Optional
service/ identifierType	The service type provided by the gaining provider to be switched	String	Required
service/ serviceIdentifier	The reference provided by the gaining provider to be switched	String	Required
services/ activationDate	The date that the GRCP started to provide services to the customer. The LRCP’s billing should stop on this date. It is encoded in the format CCYY-MM-DD.	String	Optional

This message will be sent by the gaining provider for all services to be switched, but can be called multiple times for a switch order if the switch is staged over multiple days/weeks/months.

The date in the trigger message is the last day of rental liability for the LRCP for the services specified (subject to contract conditions). The LRCP may process the message on a later date, but must backdate the last day of rental liability to the date in the trigger message.

The object structure for this message is as follows.



3.5.1 Business Switch Order Trigger Confirmation

In response to a valid business switch order trigger, the losing provider will reply with a business switch order trigger confirmation.

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderTriggerConfirmation"
  },
  "businessSwitchOrderTriggerConfirmation": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "services": [{}

```

```

        "serviceType": "IAS",
        "serviceIdentifier": "ABC123",
        "status": "triggered"
    }, {
        "serviceType": "NBICS",
        "serviceIdentifier": "0101111222",
        "status": "triggered"
    }, {
        "serviceType": "NBICSRange",
        "serviceIdentifier": "0101112000-0101112999",
        "status": "rejected",
        "fault": {
            "faultCode": "1429",
            "faultText": "invalid or missing service reference"
        }
    }
}
]
}

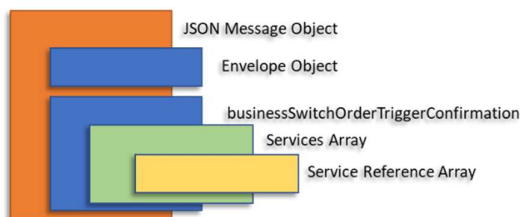
```

The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrderTriggerConfirmation	Identifies the message as being a business switch order trigger confirmation.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
services	A container of the services requested to be updated.	Array of service Objects	Optional
service/identifierType	The service type provided by the gaining provider to be switched	String	Required
service/serviceIdentifier	This is the gaining providers switching reference for the service to be switched.	String	Required
service/status	The status allows the losing provider to confirm the new state of the switching request. The value will be triggered if successful or rejected If the service could not be found or triggered and an appropriate fault block will be provided with an explanation of the reason why.	String	Optional
service/fault	In the event of a failure to identify a service, the details will be contained in this object	Object	Optional
fault/faultCode	An error code defining the nature of the error found processing the requested service update	String	Required
fault/faultText	A human-readable description of the fault code	String	Required

The message confirms to the gaining provider that the losing provider has triggered the order and the actions agreed in the matching request for that order will be carried out.

The object structure for this message is as follows.



3.5.2 Business Switch Order Trigger Failure

If the requested switch order reference cannot be found, or is already complete or cancelled, then the failure message will be returned.

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderTriggerFailure",
    "auditData": [
      {
        "name": "faultCode",
        "value": "1401"
      }
    ]
  },
  "businessSwitchOrderTriggerFailure": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "faultCode": "1401",
    "faultText": "Invalid or missing switch order reference"
  }
}

```

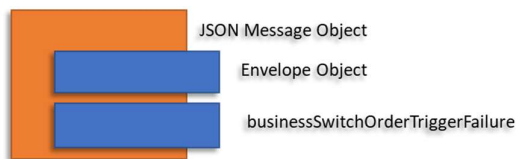
The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrderTriggerFailure	Identifies the message as being a business switch order trigger failure.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
faultCode	A code defining the nature of the fault found processing the match request	String	Required
faultText	A human-readable description of the fault code	String	Required

The message contains a fault code and description.

If any individual element results in a failure to process or finds unrecognised or invalid values, then the fault should report them as well to assist in diagnostics.

The object structure for this message is as follows.



3.5.2.1 Response Codes

See the separate “GPLB Switch Response Codes” spreadsheet for the list of response codes the losing provider will generate in the event of an error processing a message.

3.6 Business Switch Order Cancellation Request

In the event a customer wishes to cancel either an entire switch order, or individual services within a switch order, if there is an active switch in progress, they should notify the losing provider by sending a cancellation request.

It is not a requirement for the order cancellation to contain all services that have previously been ordered to switch, only those for which switching is to be cancelled need to be presented.

In the event all services need to be cancelled, the option to `processUnlistedServices` set to `yes` can be specified at the request level and omit all unswitched services.

Cancelled services are reset to a matched state, and can be ordered again for switching without the need for a new match request subject to an SLA.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchOrderCancellationRequest"
  },
  "businessSwitchOrderCancellationRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "processAllOrderedServices": "yes"
  }
}
```

Alternate:

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchOrderCancellationRequest"
  },
  "businessSwitchOrderCancellationRequest": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "processAllOrderedServices": "no",
    "services": [{
      "serviceType": "IAS",
      "serviceIdentifier": "ABC123",
    }, {
      "serviceType": "NBICS",
      "serviceIdentifier": "0101111222",
    }, {
      "serviceType": "NBICSRange",
      "serviceIdentifier": "0101112000-0101112999",
    }
  ]
}
```

This message can be sent by the gaining provider any number of times as required for all services currently ordered, or a list of services that are in the ordered state.

The services on the switch order request can be omitted and all pending orders will be cancelled. This makes the process simpler to implement in situations such as small business switches where everything will be switched at once.

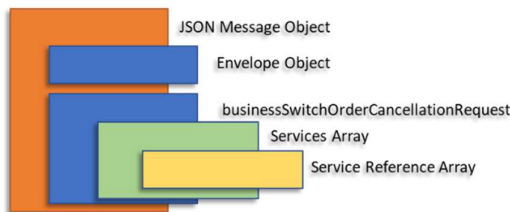
The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrderCancellationRequest	Identifies the message as being a business switch order cancellation.	Object	Required
switchOrderReference	The switch order reference is to be cancelled.	String	Required
processAllOrderedServices	Valid values are yes or no . If set to yes, any ordered service not yet triggered will be considered cancelled by the LRCP. Only list individual services in this request if all service cancellation is NOT required. If no is specified, then the services must be presented individually in this request.	String	Optional (defaults to no)
services	A container of the services requested to be cancelled.	Array of services Objects	Optional
service/identifierType	The service type provided by the gaining provider to be switched	String	Required
service/servicelIdentifier	The reference provided by the gaining provider to be switched	String	Required

The message presents the switch order reference related to the switch being cancelled. The request must contain at least one service reference to be cancelled.

Any number of service references can be supplied on the request as needed by the GRCP.

The object structure for this message is as follows.



3.6.1 Business Switch Order Cancellation Confirmation

In response to a valid business switch order cancellation, the losing provider will reply with a business switch order cancellation confirmation.

This message has no additional content.

```
{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderCancellationConfirmation"
  },
  "businessSwitchOrderCancellationConfirmation": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
  }
}
```



```

    "services": [{
      "serviceType": "IAS",
      "serviceIdentifier": "ABC123",
      "status": "cancelled"
    }, {
      "serviceType": "NBICS",
      "serviceIdentifier": "0101111222",
      "status": "cancelled"
    }, {
      "serviceType": "NBICSRange",
      "serviceIdentifier": "0101112000-0101112999",
      "status": "rejected",
      "fault": {
        "faultCode": "1529",
        "faultText": "invalid or missing service reference"
      }
    }
  ]
}

```

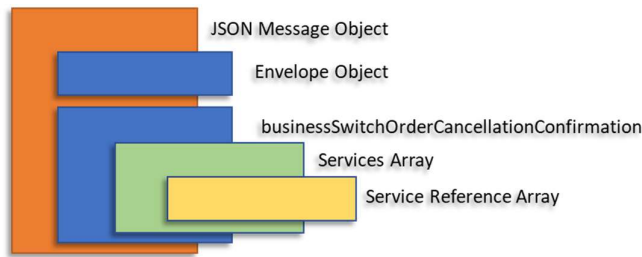
The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrder CancellationConfirmation	Identifies the message as being a business switch order cancellation confirmation.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
services	A container of the services requested to be updated.	Array of service Objects	Optional
service/ identifierType	The service type provided by the gaining provider to be switched	String	Required
service/ serviceIdentifier	This is the gaining providers switching reference for the service to be switched.	String	Required
service/ status	The status allows the losing provider to confirm the new state of the switching request. The value will be cancelled if successful or rejected If the service could not be found or cancelled and an appropriate fault block will be provided with an explanation of the reason why.	String	Optional
service/ fault	In the event of a failure to identify a service, the details will be contained in this object	Object	Optional
fault/ faultCode	An error code defining the nature of the error found processing the requested service update	String	Required
fault/ faultText	A human-readable description of the fault code	String	Required

The message confirms to the gaining provider that the losing provider has cancelled the switch order for the specified service references.

Note that the service reference is used, this is because the value has been allocated for every service by the GRCP uniquely for the switch order, and avoids any confusion between asset IDs or service identifiers.

The object structure for this message is as follows.



3.6.2 Business Switch Order Cancellation Failure

If the requested switch order reference cannot be found, or is already complete or cancelled, then the failure message will be returned.

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAB",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "routingID": "businessSwitchOrderCancellationFailure",
    "auditData": [
      {
        "name": "faultCode",
        "value": "1501"
      }
    ]
  },
  "businessSwitchOrderCancellationFailure": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "faultCode": "1501",
    "faultText": "Invalid or missing switch order reference"
  }
}

```

The elements of the JSON are defined below:

JSON element	Description	Format	Notes
businessSwitchOrderCancellationFailure	Identifies the message as being a business switch request failure.	Object	Required
switchOrderReference	The switch order to be actioned.	String	Required
faultCode	A code defining the nature of the fault found processing the match request	String	Required
faultText	A human-readable description of the fault code	String	Required

The message contains a fault code and description.

If any individual element results in a failure to process or finds unrecognised or invalid values, then the fault should report them as well to assist in diagnostics.

The object structure for this message is as follows.



3.6.2.1 Response Codes

See the separate “One Touch Switch Response Codes” spreadsheet for the list of response codes the losing provider will generate in the event of an error processing a message.

3.7 Switch Notification

The switchNotification message is to be used to facilitate a point-to-point communication between two retail providers where no existing communications channel exists, over which they can relay important information about the progression of a switch. This is an open message suitable for both residential and business switching scenarios.

The use of this notification will be defined within the different industry processes relevant to the scenarios where it should be used.

For example, In the event of a losing provider having the switch disputed by the current account holder, the LRCP will be permitted to suspend their switch order activities and prevent ceases from progressing. This would be identified to the gaining provider through business switch failure messages with an error code (TBD) that identifies the switch order as on hold and pending investigation. The losing provider must also notify the gaining provider with a switchNotification message of the pause immediately to allow the GRCP to hold order progression while the problems are resolved.

The notification message can be used for either the gaining or losing retailer to exchange information related to a switch, informing them of important switch information.

A message from the losing provider could be as follows...

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "ABC123"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "switchNotification"
  },
  "switchNotification": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "issue": "ownership",
    "action": "hold",
    "severity": "urgent",
    "ourReference": "ABC123",
    "message": "The customer has informed us that they have not authorised the switch of the requested services, and we are placing the switch on hold while we establish the facts.",
    "document": {
      "URI": " http://mydomain.com/evidence.pdf ",
      "user": "loaUser",
      "password": "xx546A65Fr"
    }
  },
  "contact": {
    "name": "Contract Disputes",
    "method": "email",
    "id": "dispute.team@mytelco.com",
  },
  "services": [{
    "serviceType": "IAS",
    "serviceIdentifier": "ABC123"
  }, {
    "serviceType": "NBICS",
    "serviceIdentifier": "0101111222"
  }, {
    "serviceType": "NBICSRange",
    "serviceIdentifier": "0101112000-0101112999"
  }
  ]
}

```

A message from the gaining provider could be as follows...

GPLS-Business Message Specification

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "switchNotification"
  },
  "switchNotification": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "issue": "ownership",
    "action": "update",
    "severity": "info",
    "yourReference": "ABC123",
    "ourReference": "XX6651155636",
    "message": "After contacting the customer they have informed us they have now obtained the authority from their directors to proceed. Please confirm this has now been resolved and the switch can be progressed."
  }
}

```

A message from the losing provider could be as follows...

```

{
  "envelope": {
    "source": {
      "type": "RCPID",
      "identity": "RAAA",
      "correlationID": "XYZ987"
    },
    "destination": {
      "type": "RCPID",
      "identity": "RAAB"
    },
    "routingID": "businessSwitchMatchConfirmation"
  },
  "switchNotification": {
    "switchOrderReference": "123e4567-e89b-12d3-a456-426614174000",
    "issue": "ownership",
    "action": "resolved",
    "severity": "info",
    "yourReference": "XX6651155636",
    "ourReference": "ABC123",
    "message": "Update confirmed, the switch will now be processed."
  }
}

```

These messages can continue to be sent by either provider any number of times as required.

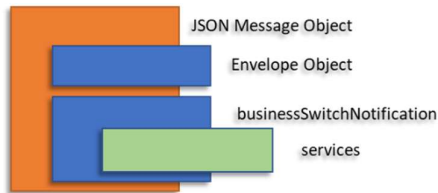
The elements of the JSON are defined below.

JSON element	Description	Format	Notes
switch Notification	Identifies the message as being a switch order notification.	Object	Required
switchOrderReference	The switch order reference is referred to by the notification.	String	Required
issue	<p>A value identifying the reason for the notification.</p> <p>Currently supported values are:</p> <p>ownership – Used to indicate a customers switch has been placed on hold by the LRCP pending a dispute related to the ownership of the services and whether they are eligible to be switched.</p>	String	Required

JSON element	Description	Format	Notes
	<p>authorisation – Used to indicate a customers switch has been placed on hold by the LRCP as the authorisation to switch has not been confirmed.</p> <p>process-failure – Issued by the either CP when an action has been agreed with the other CP, such as cancel own or trigger, but it has not been actioned.</p> <p>information – Where a CP needs to provide information to the other party, this value can be used to relay that detail.</p>		
action	<p>A value identifying the action required for the notification.</p> <p>Currently supported values are:</p> <p>hold – Used to identify a switch that has been placed on hold by the LRCP pending the resolution of the switch issue.</p> <p>update – Used by either LRCP or GRCP to provide updated information related to an ongoing dispute.</p> <p>resolved – Issued by the LRCP when they are happy for the switch to progress.</p> <p>information – Issued by either the LRCP or GRCP to provide the opposite party in a switch information that may be relevant or of use in a switch progressing effectively.</p> <p>advisory – Issued by either the LRCP or GRCP making the other aware of an activity or event that will occur shortly.</p>	String	Required
severity	<p>A value representing the severity/urgency of the message as it relates to the progression of the switch order. Use of high priorities should only be used where timing is a critical factor.</p> <p>Supported values will be: urgent, info and warning. More values can be added as they are agreed upon by the working groups.</p>	String	Required
ourReference	<p>A reference that provides the sender context for the communication.</p> <p>This could also be a case number for example generated by your own incident management systems used to track the conversation.</p>	String	Required
yourReference	<p>Only sent when replying in a conversation, return the value sent by the other CP from their ourReference field.</p>	String	Optional
message	<p>A plain text explanation of the reasons for the notification</p>	Free Text	Required
contact	<p>Details of the originator of the message to facilitate direct contact if required.</p>	Object	Optional
name	<p>The name of the contact, department etc.</p>	String	Required
method	<p>The method of contact. Supported are phone or email</p>	String	Required
id	<p>The id of the contact method, the email address or phone number to be used.</p>	String	Required
document/URI	<p>This is the URI of a document made available for the recipient to view.</p>	Free Text	Required
document/user	<p>If required to access the document, the user ID to use</p>	String	Optional
document/password	<p>If required to access the document, the user password to use</p>	String	Optional
services	<p>A container of the services applicable to the message</p>	Array of service Objects	Optional
service/	<p>The service type referenced</p>	String	Required

JSON element	Description	Format	Notes
identifierType			
service/ serviceIdentifier	The serviceIdentifier for the service referenced.	String	Required
documentLink	A URL to a document that can be provided along with the message if more information is required to be supplied.	String (URL)	Optional
services	A container of the services applicable to the message	Array of service Objects	Optional
service/identifierType	The service type referenced	String	Required

The object structure for this message is as follows.



WARNING: As this message contains free text and either provider could choose to share commercially sensitive or personal information, it is recommended that this message is encrypted.

3.8 Message Summary

The following table identifies who is responsible for raising each message type:

Gaining Provider	Losing Provider	TOTSCo Hub
businessSwitchMatchRequest	businessSwitchMatchConfirmation businessSwitchMatchFailure	messageDeliveryFailure
businessSwitchOrderRequest	businessSwitchOrderConfirmation businessSwitchOrderFailure	
businessSwitchOrderUpdateRequest	businessSwitchOrderUpdateConfirmation businessSwitchOrderUpdateFailure	
businessSwitchOrderTriggerRequest	businessSwitchOrderTriggerConfirmation businessSwitchOrderTriggerFailure	
businessSwitchOrderCancellation Request	businessSwitchOrderCancellation Confirmation businessSwitchOrderCancellationFailure	
businessSwitchNotification	businessSwitchNotification	

3.9 Data Types

The message specifications identify a number of data types. Below are the definitions of those datatypes that implementers of the GPLB specification should follow to ensure message and process compatibility.

3.9.1 String

A string is a sequence of characters which at most can be 256 characters long. Some instances of String in the document may specify some precise formatting rules for the strings content, for example a formatted date, others will be free format.

3.9.2 Free Text

Where a string of characters can reasonably be in excess of 256 characters, a Free Text value can be as long as 8KB in length and format rules will be the same as for String (Hub message size limitations may apply to long messages).

3.9.3 Object

An object for the purpose of this document is a simple named container and does not have any data content itself.

3.9.4 Array of (?) Objects

An array of objects is a named container in JSON terms that contains a list of objects of the specified type, but those objects are not explicitly named in the JSON message body.

For example, a services array contains a list of service objects, but is encoded as follows.

```
"services": [{
  "serviceType": "IAS",
  "serviceIdentifier": "ABC123",
}, {
  "serviceType": "NBICS",
  "serviceIdentifier": "0101111222",
}, {
  "serviceType": "NBICSRange",
  "serviceIdentifier": "0101112000-0101112999",
  "activationDate": "2023-05-27"
}
]
```

In the above example the service objects themselves are not named, but implied based on the services container.

End of document