



Orange Business Applications API offer

Sequence diagrams and examples

v1.3

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INTRODUCTION

This appendix is a complement to the general « API description ». Its aims at giving some details:

- presents the logical API calls in sequence diagrams,
- details data that are supplied by Orange or supplied or modified by the partner,
- gives an example for each call.

It is a RESTful API based on standard TMF Open APIs.

All communications use UTF-8 JSON data (do not forget to indicate in the header http that you are sending UTF8 JSON data).

Exemple : Content-Type : application/json ;charset=utf-8

Timeout : The timeout on the orange partner platform is 30 s. If the return of POST is more than 30s, you must manage this post in asynchronous mode : return acknowledged then event completed when the order processing and the generation of licenses is effective.

CAUTION: data that are tagged « N » or « optional » in the arrays are not supplied. It involves that only mandatory fields that are tagged “O” without optional flag can generate an exception if not supplied.

1 DOCUMENT VERSIONS

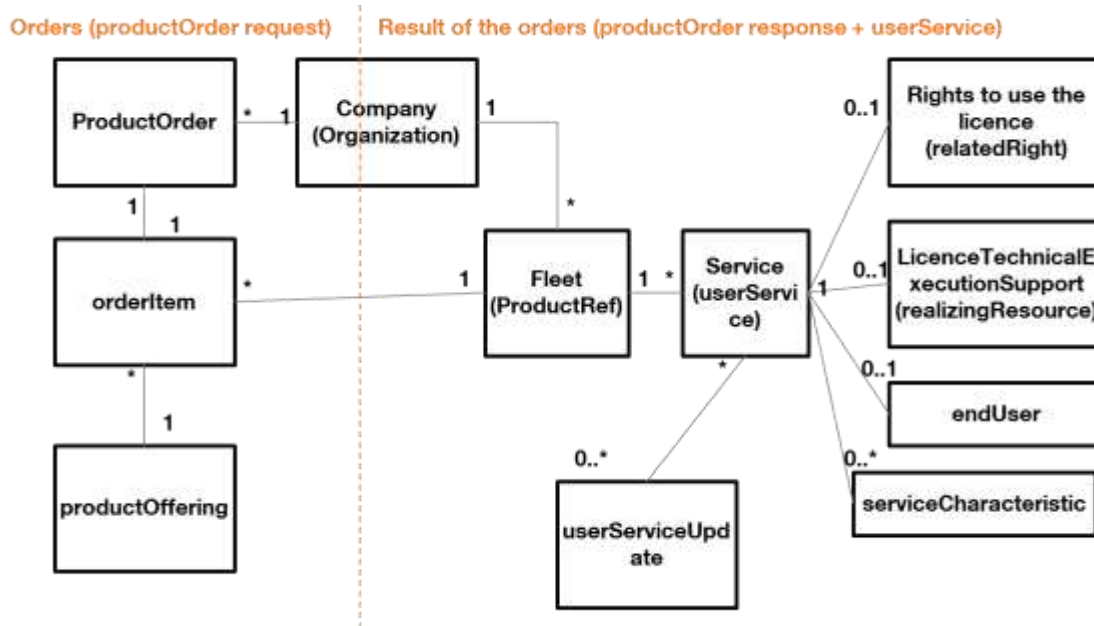
Version number	Date of version	Nature of changes
v1.0	2019-05-15	First version for Orange Business Applications
v1.1	2019-05-23	Modifications after internal verification of the document
V1.2	2021-01-27	Deletion of endUserOperation inside productOrder API, endUserOperation exists only inside userService API
V1.3	2022-02-08	Update of documentation to take into account feedback from the latest on-boarded partners

2 GENERAL DESCRIPTION OF THE DATA USED IN THE API

2.1 Logical model for productOrder and userService

Logical model provides explanation about principal objects and their relationship for both productOrder and user service API.

The cardinalities are not the cardinality of APIs as the resource is used both to post the request and to collect the answer. So, for some objects generated by the POST request, it could not be mandatory in the API (could not be provided in the request for example) but it is mandatory in logical schema as it is mandatory in the answer (mandatory in logical relationship between object).



- Company:
 - o **Company** is the customer who requires the service.
- “Orders” part of the schema:
 - o A **productOrder** is an order that a company sends to Orange to create a new account for some applications (creation of a customer) or to add licences inside an existing account.
 - o An **orderItem** is a line of the order providing information about:
 - the service to activate : **productOffering** is the information of the service in the catalogue in particular it is the service code to identify what is the service to activate. This code is defined between Orange and the partner so that the partner can identify easily the service to activate.
 - the quantity of the service to activate: it allows to know how many services have to be provided.
 - There will be only one orderItem per productOrder (one kind of service ordered per order), the quantity provided in the orderItem allows to know how many services to activate
- “Result of the orders” part of the schema:
 - o **Service:**
 - It is the service provided by the partner.

- Additional information could be added especially when service is an application licence:
 - rights to use the service (login): **relatedRight**
 - the technical way the service is used (URL for services such as data storage, IMEI (or MAC Address or IP address) for licence dedicated to one device in particular, mobile number (or fixed number) for licence dedicated to one mobile line): **realizingResource**
 - user using the service: **endUser**, people linked to the licence. It is useful during service life to identify more easily which is the licence to stop, which is the licence which has a technical problem (provide user name is easy for a customer to identify licence much more than providing a licence id which could be a technical number with lots of digits and special characters)
 - technical characteristics of the service: **serviceCharacteristic**, it could functionalities of the service (canTakeNote for example) or technical details (AvailableDataStorage, AuthorizedDeviceCount...).
- **Fleet:**
 - fleet is a group of services corresponding to the “account” opened for a customer at first order.
 - The id of the fleet could be:
 - a specific id identifying this account (several ids possible for one customer as a customer can have several technical accounts to separate services),
 - or it could be the same id as the id of the customer (in this case, customer will have only one account for all his services).

It depends on the way the list of services is managed inside partner's information system.
 - At first order, no fleet number is provided by Orange in the request, the fleet number is expected in the response as a mandatory information provided by the partner.
 - For next orders, one of the fleet number given by the partner is provided by Orange. The partner is free to reuse this fleet number or another existing one to link the required new services or to generate a new one to add these new services.

2.2 Model of data used inside productOrdering

To see it easily, use zoom at 200%.

2.4 Operations coming from Orange

All the possible use cases are described here using sequence diagrams. However, some features are not mandatory (see the array bellow).

Feature	API	optional/mandatory
Creation of a customer	productOrdering	mandatory
Ordering user licenses	productOrdering	mandatory
Deletion of a customer	productOrdering	mandatory
Consultation of licenses	userService	mandatory
Change state of licenses	userService	mandatory
Deletion of licenses	userService	mandatory
Change product offering for licenses	userService	optional

The features used are given in Annex 2 of the partnership agreement.

There are 2 main types of user service management :

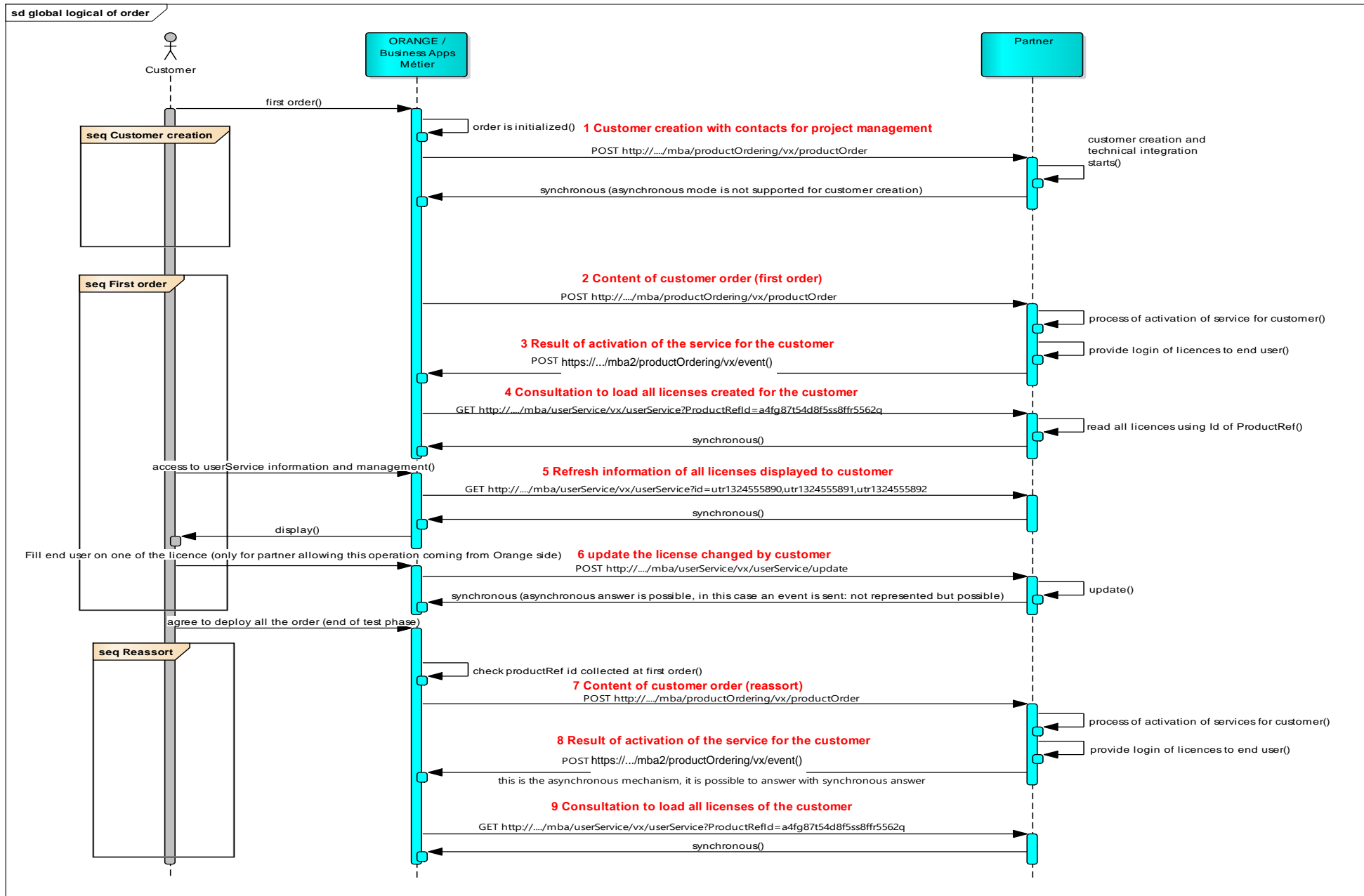
- Operations on the fleet (add license). The Product Ordering API is used
- Operation on one or many user services. The User Service API is used :
 - consult the user service,
 - change the product offering of a user service,
 - activate, suspend or delete a user service.

IMPORTANT NOTE: only one operation is presented for each use case. Only one operation is possible in the same API call. So, the partner must check and execute all the operations mentioned in the request.

3 USE CASES

3.1 Deploying a new customer

The sequence diagram below represents the interactions between the customer and the partner to deliver a business application ordered by the customer.



The main information exchanged for each flow is the following:

3.1.1 Customer creation

1- Customer creation with contacts for project management (synchronous only)

- The request provides: The company information and contacts
- The response provides: the customer ID known by the partner

3.1.2 First order

2- Content of customer order (first order):

- The request provides: the product offer and the number of licenses to be activated for the customer. It can also provide detailed information for each license (the technical resource supporting the user service, some technical characteristics, end user information ...)
- The response provides: an “acknowledged” status (here we considered that the answer was asynchronous). Synchronously, the response provides order state and the ID of the fleet of licenses (see below “Result of the activation of the services” for details)

3- Result of the activation of the services (asynchronous result – order event)

- The request provides: the ID of the fleet of licenses of the customer (productRefId), the status of the request (completed or failed); if the result is failed, the field note can give the reason of the status.
- Response: ID of the event

4- Loading all licenses created for the customer

- The request parameter is the ID of the fleet (productRefId) returned at step 3. It means « return all licenses of the fleet identified by productRefId »
- Response: The list of licenses (user Service) generated in the activation operation with all the associated information at that time.

Any operation identified in the chapter « customer user service management » can be done with licenses activated. This diagram only illustrates the update of the user of a license.

5- Refresh information of all licenses displayed to customer

- The parameter of the request is a list of user services corresponding to the list shown to the customer in its web page (page scrolling).
- Response: the list of licenses (user Service) with these IDs and all the associated information at activation time.

6- Update the license changed by customer

- Request provides: changed information of some licenses (end user information here).
- Response provides: the licenses with the same information and a status of the update (here we consider the response is synchronous). The partner may respond in an asynchronous way, in which case an event must be sent (See chapter « customer user service management » for an example).

3.1.3 Adding new services when customer already exists (“Reassort”)

7- Content of customer order (reassort):

- Request provides: the ID of the fleet (productRefId) returned by the partner during the first customer order, the product offer and the number of new licenses to activate. It can also provide detailed informations for each license (the technical resource supporting the user service, some technical characteristics, end user information ...).

- Response provides: an 'acknowledged' status (here we considered that the answer was asynchronous). Synchronously, the response provides order state and the ID of the fleet of licenses (see below "Result of the activation of the services" for details).

8- Result of the activation of the service for the customer (asynchronous result – order event)

- Request provides : the ID of the fleet of licenses (productRefId), the order state (completed or failed). If the state is failed, the field 'Note' may give the state reason. The productRefId returned may be different from the one provided in the request (if possible, the partner creates the user services attached to the fleet whose id is supplied, else the partner creates the user services attached to another fleet, either an existing or a new one).
- Response: ID of the event

9- Loading all licenses created for the customer

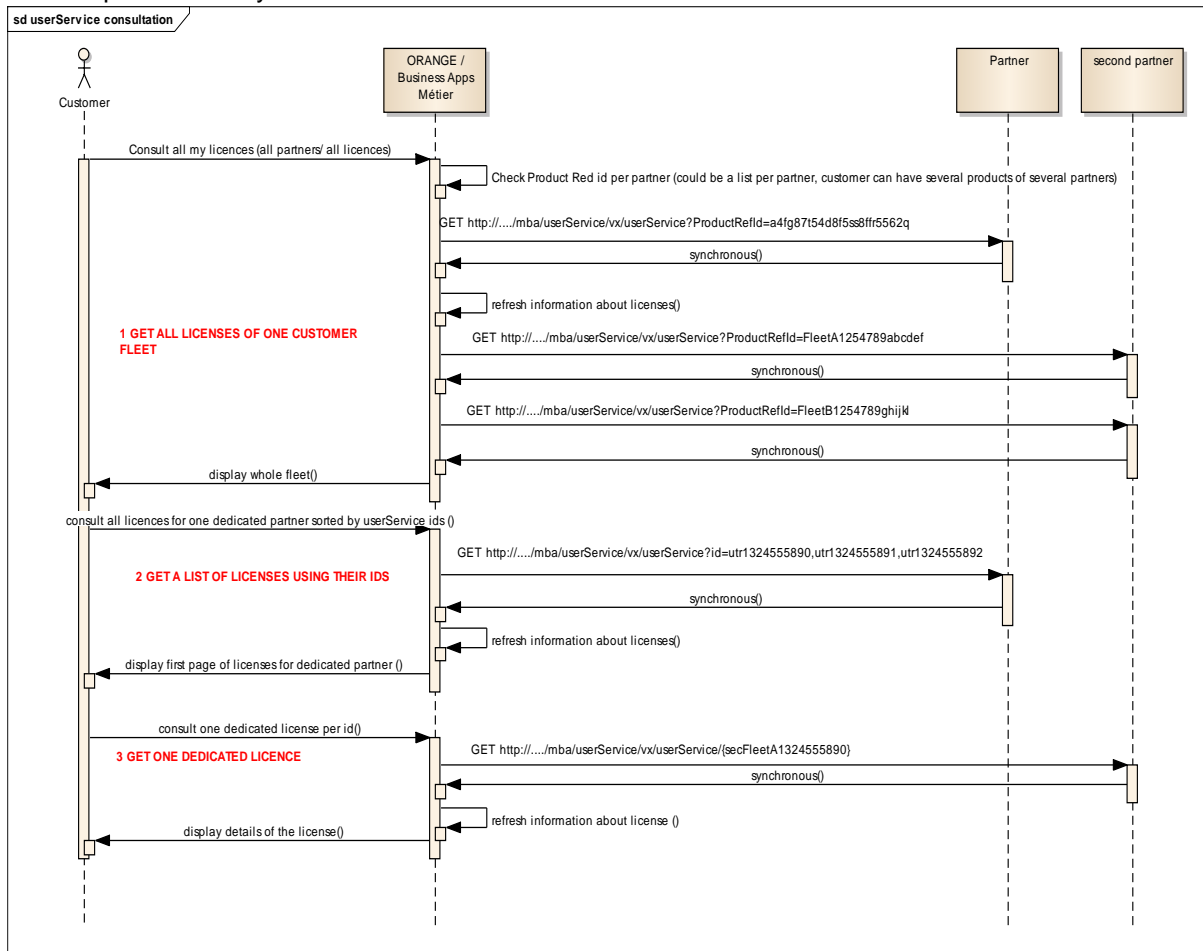
- Request parameter: productRefId (with value returned in the step 8).
- Response provides: the list of licenses (userService) generated at the activation step with all know information after the activation.

3.2 Managing the generated services

3.2.1 User service consultation : user service API (Orange -> Partner)

1. **Get all licenses of one customer fleet** : the request parameter is the ID of the fleet of licenses (productRefId returned by the partner in the product Ordering API) .

GET responses are synchronous.



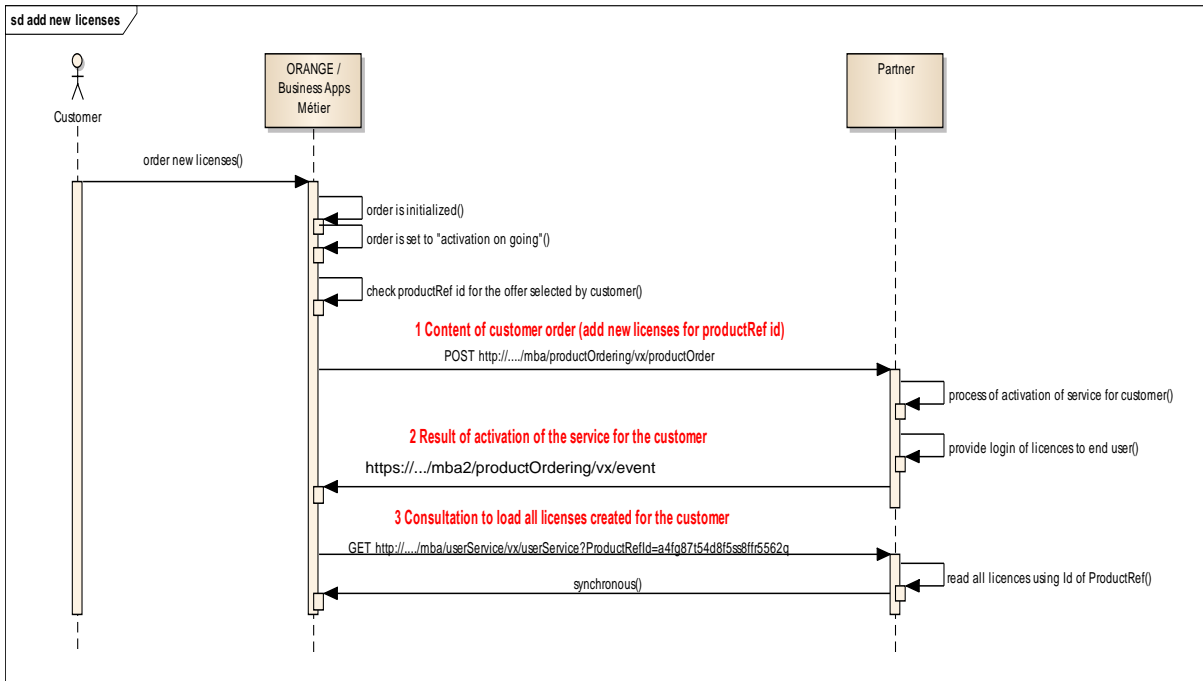
3.2.2 Order new licenses for a customer: Product Ordering API (Orange -> Partner)

The activation of new licenses for a customer can be done synchronously or asynchronously by the partner.

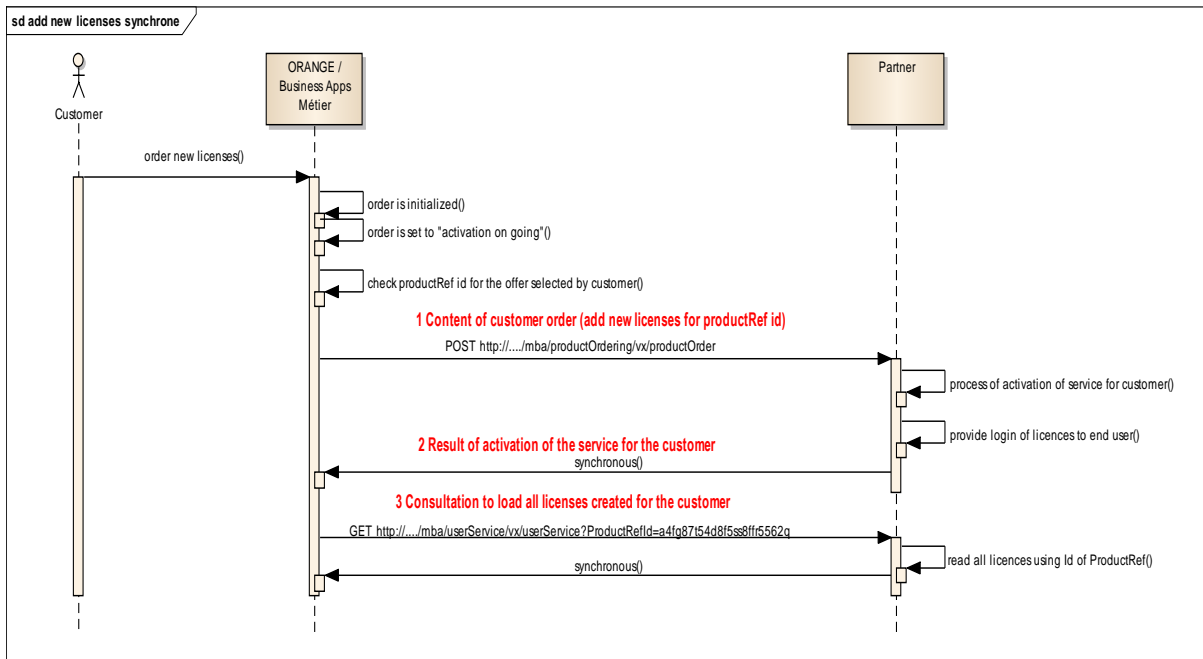
A *state* attribute of the HTTP POST response returned by the partner indicates how the partner will send back the result of the activation:

- *ProductOrder.state* = *completed* or *failed* means a synchronous answer. The result of the activation is in the same HTTP POST response.
- *ProductOrder.state* = *acknowledged* means an asynchronous answer. The partner will POST `/productOrdering/event` including the result to Orange after activation.

Note: in this release, the order request contains only one order item.



Sequence diagram for asynchronous response



Sequence diagram for synchronous response

3.2.3 Change the product offering of a fleet of licenses (Orange -> Partner)

If the feature is supported, the process is the same as the change of the product offering of many licenses. See next chapter 3.2.4.

3.2.4 Change the product offering of one or many licenses: user service API (Orange -> Partner)

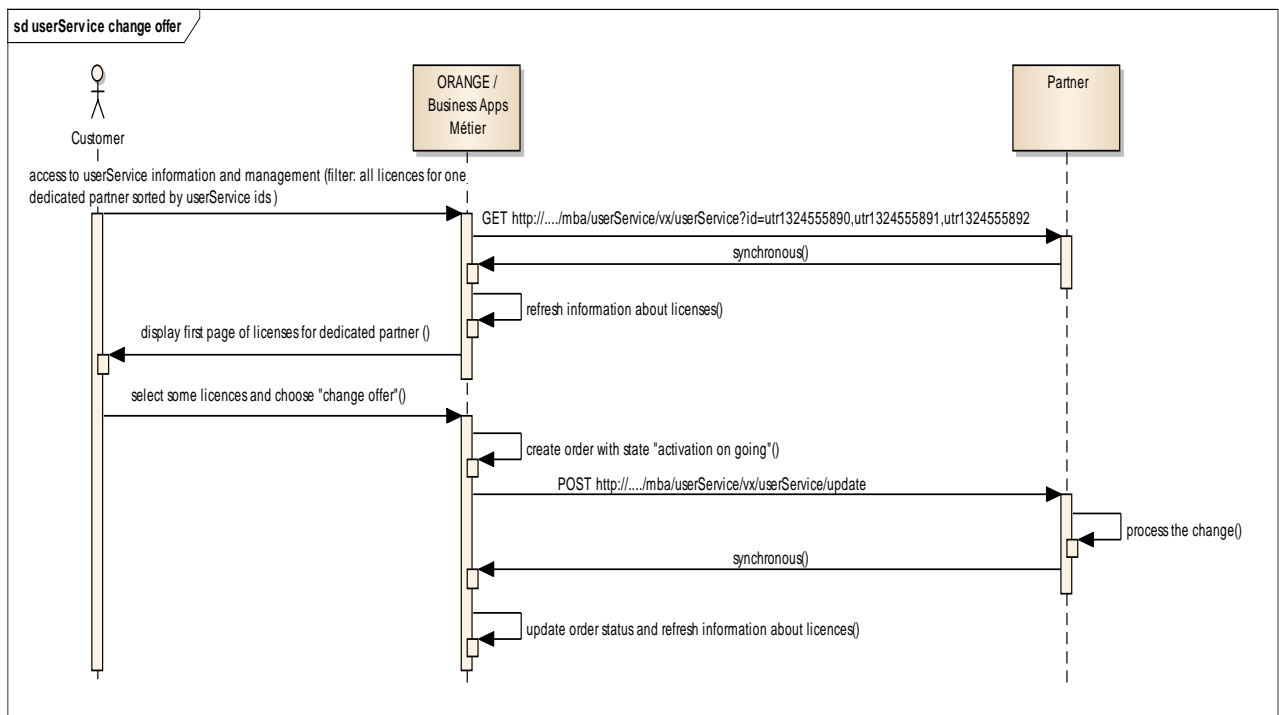
If the feature is supported, the customer can migrate part of its fleet of licences from a product offering to another.

The result of the operation can be done synchronously or asynchronously by the partner.

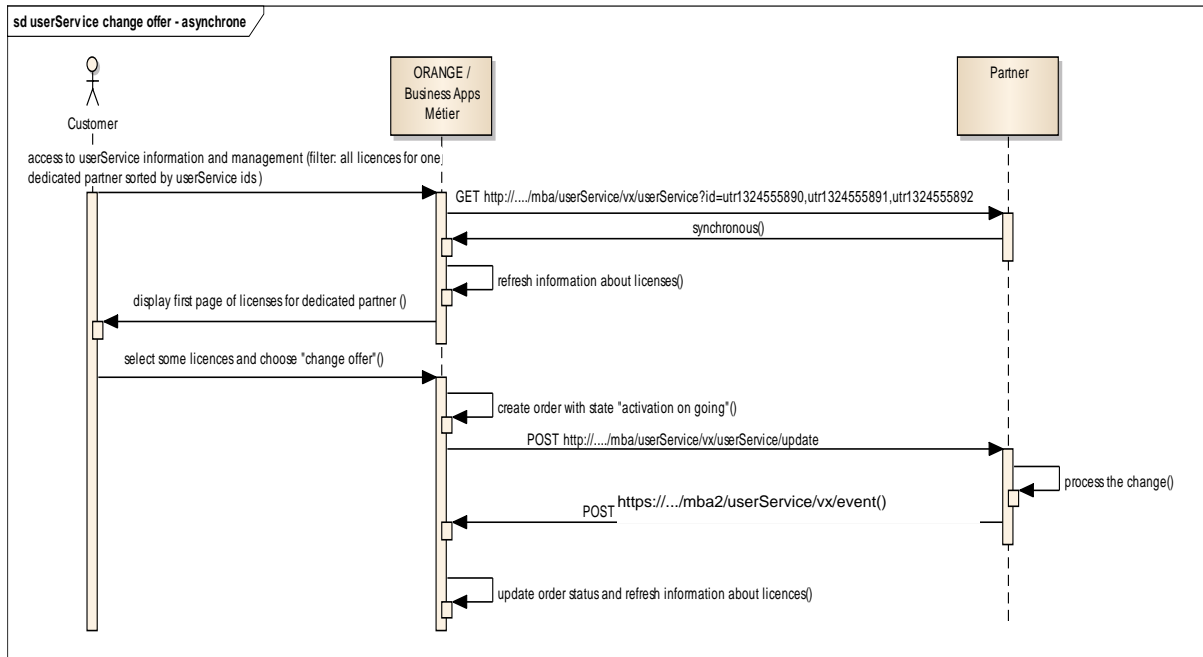
A *state* attribute of the HTTP POST response returned by the partner indicates how the partner will send back the result of the activation:

- *State* = completed or failed means a synchronous answer. The result of the activation is in the same HTTP POST response.
- *State* = *acknowledged* means an asynchronous answer. The partner will POST /productOrdering/event including the result to Orange after activation.

Note : *The global response must be completed or failed. All requests for changes (array of user services) are managed as a transaction.*



Sequence diagram for changing the product offering of some licences with synchronous response.



Sequence diagram for changing the product offering of some licences with asynchronous response.

3.2.5 Change the state of a user service: user service API (Orange -> Partner)

If the feature is supported, Orange may requests the partner to suspend ou activate a user service. Orange may also request the partner to delete a user service.

A user service may be suspended for many reasons:

- The customer wishes to suspend some licenses for its own reasons (misuse of an application by an employee for example)
- Orange detected a problem (non-payment, fraud on the use, the overshoot of fair uses)

After suspension, the user service may be reactivated by the customer or by Orange.

A suspended user service continues to be billed.

The user service is not deleted by suspension or re-activation and the login or passwords are not changed.

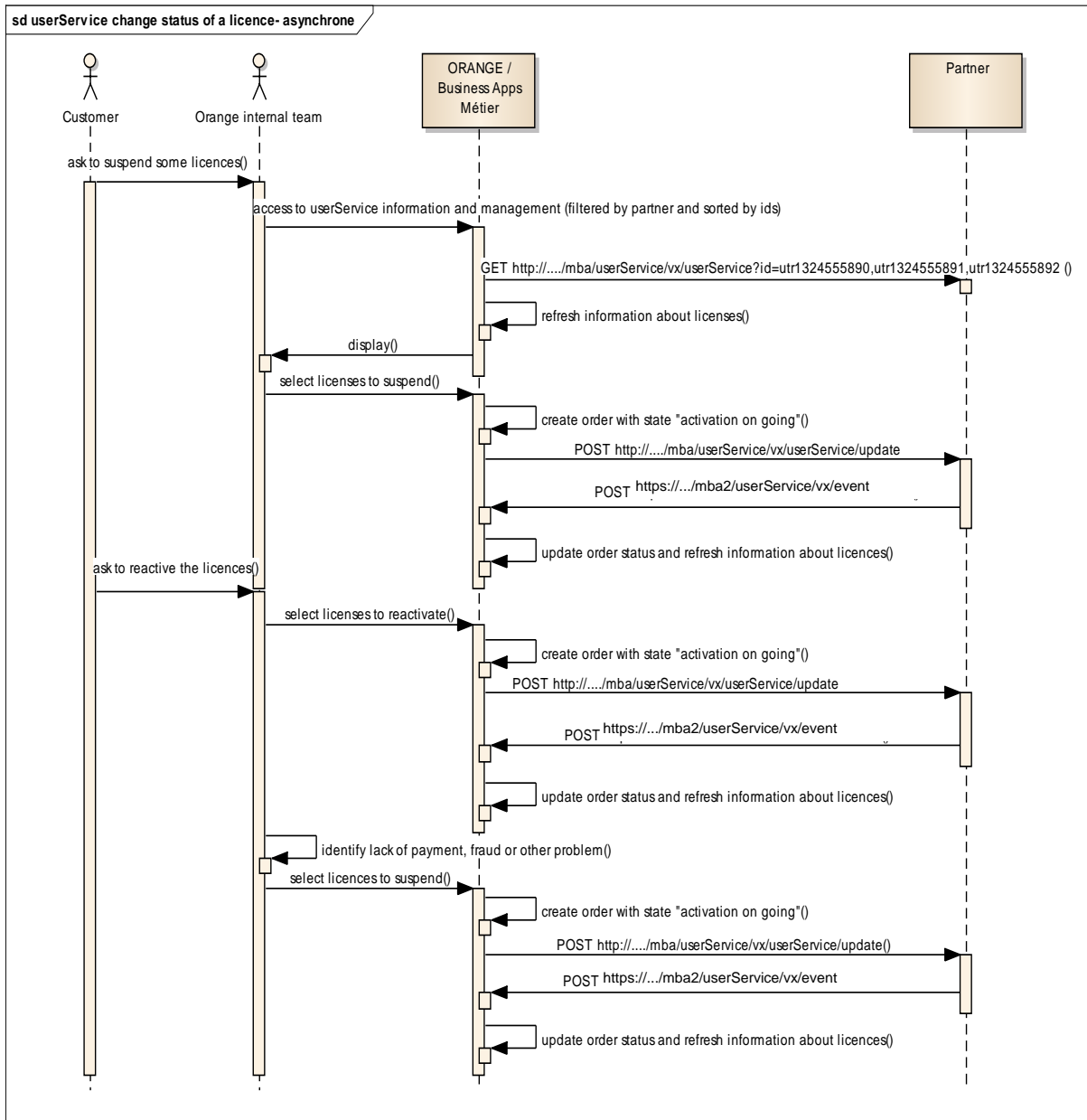
The change of the state of a user service can be done synchronously or asynchronously by the partner.

A *state* attribute of the HTTP POST response returned by the partner indicates how the partner will send back the result of the operation:

- *State* = completed or failed means a synchronous answer. The result of the operation is in the same HTTP POST response.
- *State* = *acknowledged* means an asynchronous answer. The partner will POST / *userService* /*event* including the result to Orange after the operation.

Note: The global response must be completed or failed. All requests for changes (array of user services) are managed as a transaction.

The following sequence diagram shows the asynchronous mode. But the synchronous mode is also possible.



Sequence diagram for changing the state of a user service in an asynchronous mode.

Note: synchronous response is also possible but is not illustrated here.

3.2.6 Delete one or many services: user service API (Orange ->Partner)

A customer can delete some licenses of its fleets.

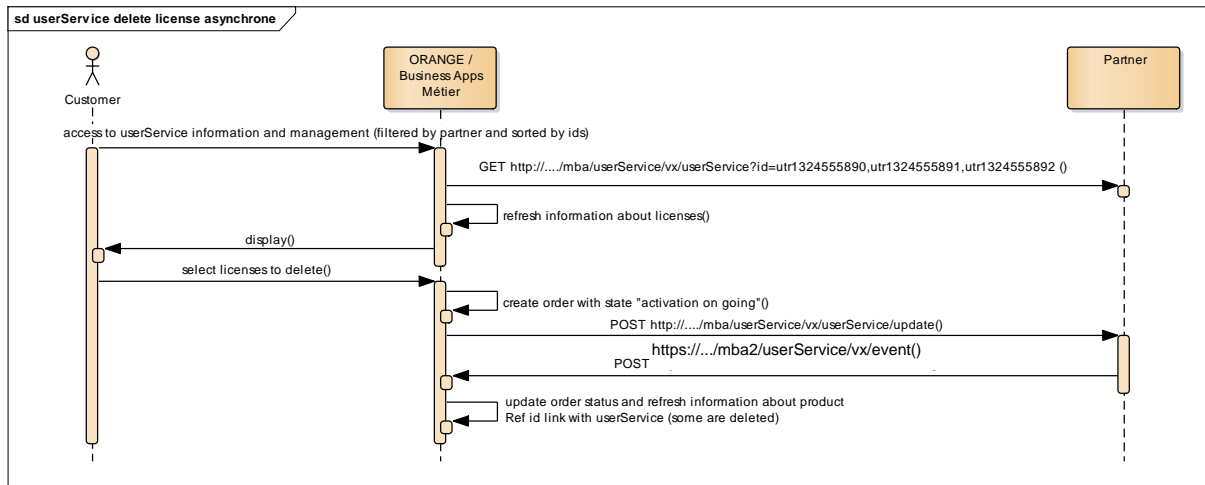
Deletion of licenses can be executed synchronously or asynchronously by the partner.

A *state* attribute of the HTTP POST response returned by the partner indicates how the partner will send back the result of the operation:

- *state* = completed or failed means a synchronous answer. The result of the operation is in the same HTTP POST response.
- *state* = *acknowledged* means an asynchronous answer. The partner will POST / *userService* /*event* including the result to Orange after the operation.

Note: The global response must be completed or failed. All requests for changes (array of user services) is managed as a transaction.

The following sequence diagram shows the asynchronous mode. But the synchronous mode is possible.



Sequence diagram for cancellation of licences with asynchronous response.

The synchronous mode is also possible but not illustrated here.

3.2.7 Event of userService coming from partner request

When partner can change data related to userService because, for example, partner provides a customer webportal where this information can be modified, it is expected that these changes are provided to Orange when they are done on customers coming from Orange IS.

Feature	API	optional/mandatory
Management of end user using licenses (add, modify, delete)	userService	optional
Management of technical resource supported by the license	userService	optional
Renewal of the login of license	userService	optional

The features used are given in Annex 2 of the partnership agreement.

There are 2 main types of user service management :

- Operations on the fleet (add license). The Product Ordering API is used.
- Operation on one or many user services. The User Service API is used :
 - consult the user service
 - manage the end-user
 - change the product offering
 - activate, suspend or delete the service
 - manage the technical resource
 - renew the login

IMPORTANT NOTE: only one operation is presented for each use case. Only one operation is possible in the same API call. So, the partner must check and execute all the operations mentioned in the request.

To do so, partner uses the event of userService to push the changes to Orange.

Changed data requiring this behavior are the following:

- relatedEndUserConfigurationOperation
- relatedRightOperation
- relatedServiceCharacteristicOperation

This event is sent independently from Orange request.

3.2.7.1 Renew the login: provided by partner, not provided by Orange (Partner → Orange)

If the feature is supported, the customer can, on partner side, change his login. In this case, partner provides the information to Orange to allow better answer of Orange support team when customer calls Orange support and provides login to identify the userService to change or to support.

The renewal of login is done asynchronously by the partner using event userService call.

3.2.7.2 Operations on the end user of a service: provided by partner, not provided by Orange (Partner → Orange)

If the feature is supported, the customer can manage end users linked to services, on partner side :

- add a user on a service which had no user ,
- suppress the user from a service to free a license,

- Modify the informations of a user allocated to a service.

Orange always supplies the *endUserId* attribute generated by the partner and returned to Orange.

The changes on endUser is done asynchronously by the partner using event *userService* call

3.2.7.3 Manage the technical resource of a service: provided by partner, not provided by Orange (Partner → Orange)

If the feature is supported, the customer can modify the technical resource the service depends on, for example a mobile line. This is managed on partner side.

The technical resource defines the type of medium (Type of *RealizingResource*) on which the licenses are running to deliver the service to the end user. Typical examples of realizing resource are an URL (access to the service via a URL), an email, a phone number, IMEI, etc. In the APIs, the value of this item is called *RealizingResource*.

If the management of the technical resource is supported, the partner must define, for each product offering, the technical resource that will be exchanged with Orange through the APIs:

- type (name): maximum 50 characters (eg "Mobile")
- For each property (value):
 - its name (name): maximum 50 characters (eg "sn")
 - its description and format (example: 10-digit local calling format starting with 0)

The changes on technical resource is done asynchronously by the partner using event *userService* call.

3.3 Deletion of a customer: Product Ordering API

The deletion of a customer is different from the deletion of some licences.

The customer can only be deleted if all its licenses are removed beforehand.

The deletion of a customer can be executed synchronously or asynchronously by the partner.

A *state* attribute of the HTTP POST response returned by the partner indicates how the partner will send back the result of the operation:

- *State* = completed or failed means a synchronous answer. The result of the operation is in the same HTTP POST response.
- *State* = *acknowledged* means an asynchronous answer. The partner will POST / *userService* /event including the result to Orange after the operation.

4 SEQUENCE DIAGRAMS AND EXAMPLES PER USE CASE

In this chapter, the use cases described in chapter 2 are completed with:

- Request data
- Response data
- Examples in json format (request, response in synchronous mode, response and event in asynchronous mode)

Rules of presentation in the following arrays

- O = supplied
- N = Not supplied
- M = Modified
- A = Added
- O/M = supplied and Modified
- O/A = supplied and Added
- O/I = supplied and not modified
- Optional = supplied if data existing for this field
- Mandatory= always supplied

Fields with 'O' tag and without 'optional' tag are mandatory.

IMPORTANT NOTE:

The request parsing must take into account that any field with « N » tag or “optional” tag will not be supplied (if optional, null value accepted). An error must not be raised. Only “O” fields with no data supplied can raise an error.

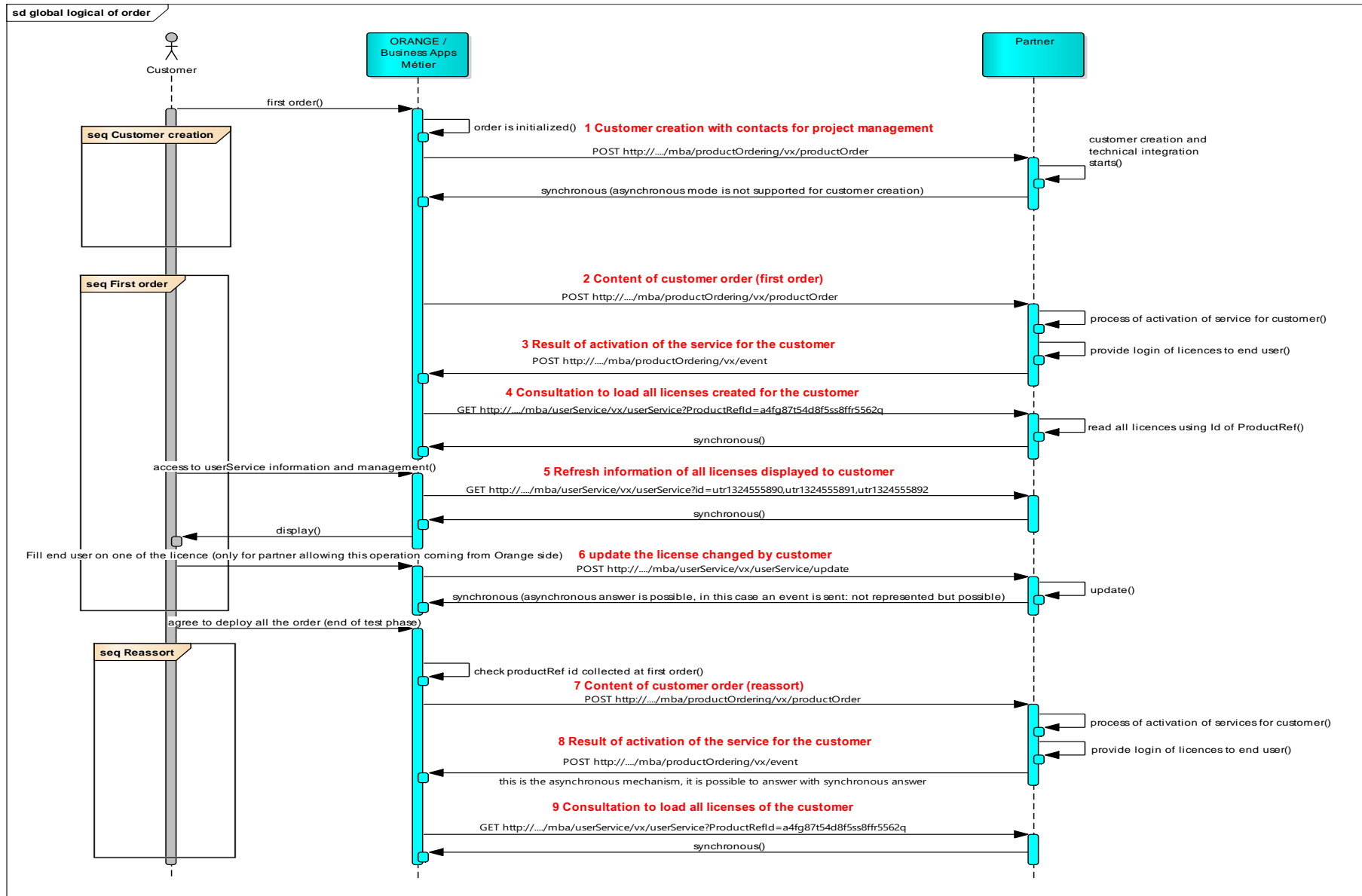
Optional data must be supported following these rules:

- **is sent when data exist for this optional field, it is expected that when it is sent, no error is raised**
- **is not sent when no data exists for this optional field: in this case, following situations must be supported:**
 - optional data contains “null” value
 - optional data is not provided at all (the corresponding tag does not exist inside the json request or response)

DO NOT PROVIDE OPTIONAL NODE with {}

- **as a node can be optional but can contains mandatory data when provided**
- **{ } is considered as provided with no mandatory content provided and it will cause an error**

4.1 Deployment of a new customer



4.1.1 1- Customer Creation with contacts for project management:

Request and response data are listed here.

The asynchronous mode is not supported for the customer creation.

Mandatory or optional constraints concerns only this use case and should be respected for this use case. As API design supports all uses cases, a data, optional in one use case and mandatory in a another or optional in the request and mandatory in the response, appears as optional in the design (see swagger document).

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>synchronous</u> result
id – string- the id generated by partner to trace the order		N	O/A (mandatory)
externalReference - JSON node - the reference of the order used by Orange (mandatory)	type – string - type of externalReference (orange) (mandatory)	O (mandatory)	O/I (mandatory)
	id- string- id of the externalReference (mandatory)	O (mandatory)	O/I (mandatory)
category- string- to indicate if the order is for test objective or definitive deployment		N	N
state- string- status of the order (mandatory)		O (mandatory) = initialized	O/M (mandatory) = completed or failed
note – JSON node- to add comment on an order to ease the understanding of the order state (optional) If note is provided in the request, contains only note of the partner, do not provide note of the request when a new	text- string - text of the comment	Optional	O/A (optional) note is added
	date – dateTime - date and time of the comment	Optional	O/A (optional)
	author – string - author of the comment	Optional	O/A (optional)
orderDate- string- date of the creation of the order on Orange side (mandatory)		O (mandatory)	O/I (mandatory)
completionDate- string- date to precise by partner to indicate when the order was processed		N	O/A (mandatory))
requestedStartDate – string- date agreed with customer to start activation of the application or (mandatory)		O (mandatory)	O/I (mandatory)

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>synchronous result</u>				
orderItem - array of JSON node- content of the order N: (not provided for customer creation)	id - string- identifier of the order line (set by Orange)		N	N			
	state – string – state of the order line		N	N			
	action – string – type of movement required in the order <ul style="list-style-type: none"> 'add' when the productRef id has to be created (first order) or when new services are required inside an existing productRef id 'modify' when all user services of productRef id has to be migrated to a new type of application provided by ProductOffering, 'delete' when the customer stops the contrat for all userServices 		N	N			
	productRef - JSON node ProductRef – details on the service fleet concerned by the orderitem	id – string - Unique identifier of the userService Fleet then used to retrieve list of produced user Services		N	N		
		userServiceQuantity – string- number of userServices to create. Filled only for new user services orders. This is the delta quantity to add (ex: if customer has already 90 userService and want to add 10 new user Services, then this string will contain 10)		N	N		
		characteristic –array of JSON node of ProductRefCharacteristic - parameters to apply to the fleet (ex: language, diskpace, SLA level). These characteristics are defined at the moment product offering is defined between partner and orange	name - string – name to identify the characteristic		N	N	
			value – string- value of the characteristic		N	N	
	productOffering – JSON node ProductOffering – offer	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue		N	N		
		<table border="1"> <tr> <td>type – string - type of externalReference (orange)</td> </tr> <tr> <td>id- string- id of the externalReference</td> </tr> </table>		type – string - type of externalReference (orange)	id - string- id of the externalReference		
		type – string - type of externalReference (orange)					
id - string- id of the externalReference							
name – string – short description of the offer in the Orange catalogue		N	N				
relatedOrganization – JSON node Organization – company information (mandatory)	id – string – id of company		N	O/A (mandatory)			
	externalReference – JSON node ExternalReference – see first line (mandatory)	type – string - type of externalReference (orange)	O (mandatory)	O/I (mandatory)			
		id - string- id of the externalReference	O (mandatory)	O/I (mandatory)			
	tradingName - string – name of the company (mandatory)		O (mandatory)	O/I (mandatory)			
	registrationNumber – JSON node Identification – registration number (optional)	type – string – type of registration number (SIREN, SIRET, ...)		O (mandatory if registrationNumber is provided)	O/I (mandatory if filled in request)		
		id – string – value of registration number		O (mandatory if registrationNumber is provided)	O/I (mandatory if filled in request)		
issuingAuthority – string- the organization which delivered the registration number (INSEE)		O (mandatory if registrationNumber is provided)	O/I (mandatory if filled in request)				

Ressource ProductOrder			supplied in the request by Orange	supplied in the synchronous response if <u>synchronous result</u>	
postalAddress - JSON node PostalAddressContactMedium - address of the company (mandatory)	streetNumber - JSON node of StreetNumber	number - string - number in the street	N	N	
		letter - string - letter to complete number	N	N	
	postcode - string - postal code		O (mandatory)	O/I (mandatory)	
	stateOrProvince - string- name of the state of province		N	N	
	street1 - string - first line of address contains concatenation of the address		O (mandatory)	O/I (mandatory)	
	street2 - string- second line of address		Optional	O/I (optional)	
	country - string - country code (FR for France)		O (mandatory)	O/I (mandatory)	
	city - string - city name		O (mandatory)	O/I (mandatory)	
role - string - role of the company (customer, customerSubcontractor, other) (mandatory)		O (mandatory)	O/I (mandatory)		
characteristic - array of JSON node PartyCharacteristic - to precise details (such as APE code) (optional)	name - string - name to identify the characteristic		Optional	O/I (optional)	
	value - string- value of the characteristic				
relatedContact - array of JSON node Individual - list of contacts in company to proceed the order (max 5) Mandatory	givenName - string - first name of the contact (mandatory)		O (mandatory)	O/I (mandatory)	
	familyName - string - family name of the contact (mandatory)		O (mandatory)	O/I (mandatory)	
	email - string - email of the contact (mandatory)		O (mandatory)	O/I (mandatory)	
	mobileNumber - JSON node of TelephoneNumber - mobile telephone number of the contact Optional	cc - string - international country prefix, ex 33 for France mandatory if mobile number node is provided (note that cc is provided even if sn is empty)		Optional	O/I (optional)
		sn - string - local phone number including local prefix, Optional			
	fixedTelephoneNumber - JSON node of TelephoneNumber - fixed telephone number of the contact Optional	cc - string - international country prefix, ex 33 for France mandatory if fixedTelephoneNumber node is provided		Optional	O/I (optional)
		sn - string - local phone number including local prefix, mandatory if fixedTelephoneNumber node is provided			
	postalAddress - JSON node of PostalAddressContactMedium - address of the contact Optional	streetNumber - JSON node of StreetNumber	number - string - number in the street	Optional	O/I (optional)
letter - string - letter to complete number					
postcode - string - postal code					
stateOrProvince - string- name of the state of province					

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>synchronous result</u>
	street1 – string – first line of address street2 – string- second line of address country – string - country code city – string – city name		
	role - string – role of the contact in the order management (customerFleetManager, customerProjectManager, or customerSignatory) (mandatory)	O (mandatory)	O/I (mandatory)
	characteristic – array of JSON node of PartyCharacteristic - to precise function in company, Optional	Optional	O/I (optional)
	externalReference e- JSON node of ExternalReference e – id of contact in orange system Mandatory	type – string - type of externalReference (orange) id - string- id of the externalReference	O (mandatory) O/I (mandatory)

Example of customer creation - request:

POST <https://<address of partner proxy>/mba/productordering/v2/productOrder>

```
{
  "externalReference": {
    "type": "orange",
    "id": "12"
  },
  "state": "initialized",
  "orderDate": "2019-05-16T13:00:48+0200",
  "requestedStartDate": "2019-05-16T13:00:48+0200",
  "relatedOrganization": {
    "externalReference": {
      "type": "orange",
      "id": "customer14"
    },
    "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
    "registrationNumber": {
      "type": "SIRET",
      "id": "572 059 459 00063",
      "issuingAuthority": "INSEE"
    },
    "postalAddress": {
      "postcode": "92240",
      "street1": "2 RUE JEAN LURCAT",
      "country": "FR",
      "city": "MALAKOFF"
    },
    "role": "customer",
  },
  "relatedContact": [
    {
```

```

    "externalReference": {
      "type": "orange",
      "id": "4"
    },
    "givenName": "Virginie",
    "familyName": "LEDOYEN",
    "email": "v.ledoyen@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": "06 86 01 44 17"
    },
    "role": "customerFleetManager"
  },
  {
    "externalReference": {
      "type": "orange",
      "id": "5"
    },
    "givenName": "Brigitte",
    "familyName": "BARDOT",
    "email": "b.bardot@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": ""
    },
    "role": "customerFleetManager"
  }
]
}

```

Example of customer Creation - synchronous mode - response (http code = 201)

```

{
  "id": "partnerOrderId2140",
  "state": "completed",
  "completionDate": "2019-05-16T13:00:49+0200",
  "externalReference": {
    "id": "12",
    "type": "orange"
  },
  "requestedStartDate": "2019-05-16T13:00:48+0200",
  "orderDate": "2019-05-16T13:00:48+0200",
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "postalAddress": {
      "street1": "2 RUE JEAN LURCAT",
      "postcode": "92240",
      "country": "FR",
      "city": "MALAKOFF"
    },
    "externalReference": {
      "id": "customer14",
      "type": "orange"
    },
    "role": "customer",
    "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
    "registrationNumber": {
      "id": "572 059 459 00063",
      "type": "SIRET",
      "issuingAuthority": "INSEE"
    }
  },
  "relatedContact": [

```

```
{
  "externalReference": {
    "type": "orange",
    "id": "4"
  },
  "givenName": "Virginie",
  "familyName": "LEDOYEN",
  "email": "v.ledoyen@malakoff-ha.fr",
  "mobileNumber": {
    "cc": "33",
    "sn": "06 86 01 44 17"
  },
  "role": "customerFleetManager"
},
{
  "externalReference": {
    "type": "orange",
    "id": "5"
  },
  "givenName": "Brigitte",
  "familyName": "BARDOT",
  "email": "b.bardot@malakoff-ha.fr",
  "mobileNumber": {
    "cc": "33",
    "sn": ""
  },
  "role": "customerFleetManager"
}
]
```

The asynchronous mode is not supported for the customer creation

4.1.2 2- Content of first customer order:

The request provides the number of licenses to activate and, for some partners if such information is required, it also provides detailed informations for each license (identifying technical resource supporting the user service at least and information identifying the user).

It's the first order and the fleet ID is not supplied in the request but the ID is supplied in the response.

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner to trace the order		N	O/A (mandatory)	O/A (mandatory)
externalReference - JSON node - the reference of the order used by Orange (mandatory)	type – string - type of externalReference (orange)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
	id - string- id of the externalReference	O (mandatory)	O/I (mandatory)	O/I (mandatory)
category - string- to indicate if the order is for test objective or definitive deployment (mandatory)		O = trial or production (mandatory)	O/I	O/I
state - string- status of the order (mandatory)		O = initialized (mandatory)	O/M = acknowledged (mandatory)	O/M = completed, ou failed (mandatory)
note – JSON node- to add comment on an order to ease the understanding of the order state (Optional) note provided in the request is not sent back. If there is a note in the answer, it is expected to be another note from partner side	text - string - text of the comment	Optional	O/M (optional)	O/M (optional)
	date – dateTime - date and time of the comment	Optional	O/M (optional)	O/M (optional)
	author – string - author of the comment	Optional	O/M (optional)	O/M (optional)
orderDate - string- date of the creation of the order on Orange side		O	O/I	O/I

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
(mandatory)		(mandatory)	(mandatory)	(mandatory)
completionDate - string- date to precise by partner to indicate when the order was processed		N	N	O/A (mandatory)
requestedStartDate – string- date agreed with customer to start activation of the service (mandatory)		O (mandatory)	O/I (mandatory)	O/I (mandatory)
orderItem - array of JSON node- content of the order (mandatory)	id - string- identifier of the order line (set by Orange) (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
	state – string – state of the order line (mandatory)	O = initialized (mandatory)	O/I = acknowledged (mandatory)	O/M = completed ou failed (mandatory)
	action – string – type of movement required in the order <ul style="list-style-type: none"> 'add' when the productRef id has to be created (first order) or when new services are required inside an existing productRef id, 'modify' when all user services of productRef id has to be migrated to a new type of application provided by ProductOffering, 'delete' when the customer stops the contrat for all userServices (mandatory)	O = add (mandatory)	O/I (mandatory)	O/I (mandatory)
	productRef - JSON node ProductRef – details on the service fleet concerned by the orderitem (mandatory)	id – string - Unique identifier of the userService Fleet then used to retrieve list of produced user Services userServiceQuantity – string- number of userServices to create. Filled only for new user services orders. This is the delta quantity to add (ex: if customer has already 90 userService and want to add 10 new user Services, then this string will contain 10)	N O (mandatory)	N O/I (mandatory)
	characteristic – array of JSON node of ProductRefCharacteristic - parameters to apply to the fleet (ex: language, diskpace, SLA level). These characteristics are defined at the moment product offering is defined between partner and orange optional	name - string – name to identify the characteristic optional value – string- value of the characteristic optional	optional optional	optional
productOffering – JSON node ProductOffering – offer (mandatory)	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)

Ressource ProductOrder			supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
		type – string - type of externalReference (orange) (mandatory)				
		id - string- id of the externalReference (mandatory)				
		name – string – short description of the offer in the Orange catalogue (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)	
relatedOrganization – JSON node Organization – company information (mandatory)	id – string – id of company (mandatory)		O/I (mandatory) Value received at customer creation	O/I (mandatory)	O/I (mandatory)	
	externalReference – JSON node ExternalReference – (mandatory)	type – string - type of externalReference (orange) (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)	
		id - string- id of the externalReference (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)	
	tradingName - string – name of the company (mandatory)		O (mandatory)	O/I (mandatory)	O/I (mandatory)	
	registrationNumber – JSON node Identification – registration number Optional	type – string – type of registration number (SIREN, SIRET, ...) mandatory if registrationNumber node is provided	O	O/I	O/I	
		id – string – value of registration number mandatory if registrationNumber node is provided	O	O/I	O/I	
		issuingAuthority – string- the organization which delivered the registration number mandatory if registrationNumber node is provided	O	O/I	O/I	
	postalAddress - JSON node PostalAddressContactMedium – address of the company (mandatory)	streetNumber – JSON node of StreetNumber optional	number – string – number in the street letter – string – letter to complete number	N	O/I (optional)	O/I (optional)
				N	O/I (optional)	O/I (optional)
		postcode – string – postal code (mandatory)		O (mandatory)	O/I (mandatory)	O/I (mandatory)
stateOrProvince – string- name of the state of province optional			Optional	O/I (optional)	O/I (optional)	
street1 – string – first line of address (mandatory)			O (mandatory)	O/I (mandatory)	O/I (mandatory)	
street2 – string- second line of address			Optional	O/I Optional	O/I Optional	
	country – string - country code		O	O/I		

Ressource ProductOrder			supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
		(mandatory)	(mandatory)	(mandatory)	(mandatory)	
		city – string – city name (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)	
		role – string – role of the company (customer, customerSubcontractor, other) (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)	
	characteristic – array of JSON node <i>PartyCharacteristic</i> – to precise details (such as APE code) optional	name- string – name to identify the characteristic, optional value – string- value of the characteristic optional	Optional	O/I (optional)	O/I (optional)	
relatedContact – array of JSON node Individual - list of contacts in company to proceed the order (max 5) Optional		givenName – string – first name of the contact, mandatory if relatedContact node is provided mandatory if relatedContact node is provided	O	O/I	O/I	
		familyName – string – family name of the contact mandatory if relatedContact node is provided	O	O/I	O/I	
		email – string – email of the contact mandatory if relatedContact node is provided	O	O/I	O/I	
		mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the contact optional	cc – string - international country prefix, ex 33 for France mandatory if relatedContact.mobileNumber node is provided	Optional	O/I (optional)	O/I (optional)
			sn – string - local phone number including local prefix, optional			
		fixedTelephoneNumber – JSON node of TelephoneNumber – fixed telephone number of the contact optional	cc – string - international country prefix, ex 33 for France mandatory if relatedContact.fixedTelephoneNumber node is provided	Optional	O/I (optional)	O/I (optional)
		sn – string - local phone number including local prefix, mandatory if relatedContact.fixedTelephoneNumber node is provided				
	postalAddress – JSON node of PostalAddressContactMedium – address of the contact optional	streetNumber – JSON node of StreetNumber optional number – string – number in the street mandatory if streetNumber node is provided letter – string – letter to complete number optional postcode – string – postal code	Optional	O/I (optional)	O/I (optional)	

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
	optional stateOrProvince – string- name of the state of province optional street1 – string – first line of address optional street2 – string- second line of address optional country – string - country code optional city – string – city name optional			
	role - string – role of the contact in the order management (customerFleetManager, customerProjectManager, or customerSignatory) mandatory	O mandatory	O/I mandatory	O/I mandatory
	characteristic – array of JSON node of PartyCharacteristic - to precise function in company, Optional name - string – name to identify the characteristic optional value – string- value of the characteristic optional	Optional	O/I (optional)	O/I (optional)
	externalReference - JSON node of ExternalReference - id of contact in orange system mandatory if relatedContact node is provided type – string - type of externalReference (orange) mandatory if externalReference node is provided id - string- id of the externalReference mandatory if externalReference node is provided	O mandatory	O/I mandatory	O/I mandatory

Note: in this release, the order request contains only one order item.

4.1.3 3- Result of the activation of the service for the customer (asynchronous result UC)

For a synchronous result step 3 does not exist. The result is supplied in the synchronous response in step 2.

For an asynchronous result, the partner will POST an event with the following data.

Ressource event of ProductOrdering	supplied in the request by the partner	supplied in the synchronous response
id – string- the id generated by Orange for each event	Optional	Optional
Type - enum: completedStateNotification, failedStateNotification	O mandatory	O/I mandatory

Ressource event of ProductOrdering	supplied in the request by the partner	supplied in the synchronous response
Time – dateTime	O mandatory	O/I mandatory
resource : productOrder resource	O: les valeurs ajoutées ou modifiées sont identiques à celles qu'il faut fournir dans le cas d'une réponse synchrone à l'étape 2 (dernière colonne) Added or modified values are the same than the ones indicated for synchronous answer step2 (last column) mandatory	Optional

Note: in this release, the order request contains only one order item.

Example of the creation of the first customer order: request

POST <https://<address of partner proxy>/mba/productordering/v2/productOrder>

```

{
  "externalReference": {
    "type": "orange",
    "id": "12"
  },
  "category": "production",
  "state": "initialized",
  "orderDate": "2019-05-16T13:00:49+0200",
  "requestedStartDate": "2019-05-16T13:00:49+0200",
  "orderItem": [
    {
      "id": "12",
      "state": "initialized",
      "action": "add",
      "productRef": {
        "id": "",
        "userServiceQuantity": "2"
      },
      "productOffering": {
        "name": "offer Name to activate",
        "externalReference": {
          "type": "orange",
          "id": "APP02XYZ01"
        }
      }
    }
  ]
}

```

```

    }
  ],
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "externalReference": {
      "type": "orange",
      "id": "customer14"
    },
    "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
    "registrationNumber": {
      "type": "SIRET",
      "id": "572 059 459 00063",
      "issuingAuthority": "INSEE"
    },
    "postalAddress": {
      "postcode": "92240",
      "stateOrProvince": "",
      "street1": "2 RUE JEAN LURCAT",
      "country": "FR",
      "city": "MALAKOFF"
    },
    "role": "customer",
    "characteristic": []
  },
  "relatedContact": [
    {
      "externalReference": {
        "type": "orange",
        "id": "4"
      },
      "givenName": "Virginie",
      "familyName": "LEDOYEN",
      "email": "v.ledoyen@malakoff-ha.fr",
      "mobileNumber": {
        "cc": "33",
        "sn": "06 86 01 44 17"
      },
      "role": "customerFleetManager"
    },
    {
      "externalReference": {
        "type": "orange",
        "id": "5"
      },
      "givenName": "Brigitte",
      "familyName": "BARDOT",
      "email": "b.bardot@malakoff-ha.fr",
      "mobileNumber": {
        "cc": "33",
        "sn": ""
      },
      "role": "customerFleetManager"
    }
  ]
}

```

Example of creation of the first order: synchronous result

Note :

In the following example, the partner returns the same ID of partner order (between customer creation and first order) because the same orange order is detected but the partner is allowed to generate a new ID for the order.

Http code 201

```
{
  "id": "partnerOrderId2140",
  "state": "completed",
  "completionDate": "2019-05-16T13:00:57+0200",
  "externalReference": {
    "id": "12",
    "type": "orange"
  },
  "orderItem": [
    {
      "id": "12",
      "state": "completed",
      "productRef": {
        "id": "fleetId356",
        "userServiceQuantity": "2"
      },
      "action": "add",
      "productOffering": {
        "name": "offer Name to activate",
        "externalReference": {
          "id": "APP02XYZ01",
          "type": "orange"
        }
      }
    }
  ],
  "requestedStartDate": "2019-05-16T13:00:49+0200",
  "orderDate": "2019-05-16T13:00:49+0200",
  "category": "production",
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "postalAddress": {
      "street1": "2 RUE JEAN LURCAT",
      "postcode": "92240",
      "country": "FR",
      "city": "MALAKOFF",
      "stateOrProvince": ""
    }
  },
  "externalReference": {
    "id": "customer14",
    "type": "orange"
  },
  "characteristic": [],
  "role": "customer",
  "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
  "registrationNumber": {
    "id": "572 059 459 00063",
    "type": "SIRET",
    "issuingAuthority": "INSEE"
  }
},
"relatedContact": [
  {
    "externalReference": {
      "type": "orange",
      "id": "4"
    },
    "givenName": "Virginie",
    "familyName": "LEDOYEN",
    "email": "v.ledoyen@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": "06 86 01 44 17"
    }
  }
]
```

```

    },
    "role": "customerFleetManager"
  },
  {
    "externalReference": {
      "type": "orange",
      "id": "5"
    },
    "givenName": "Brigitte",
    "familyName": "BARDOT",
    "email": "b.bardot@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": ""
    },
    "role": "customerFleetManager"
  }
]
}

```

Example of creation of the first order: asynchronous mode: response, then event request & response

A) http response code 201

```

{
  "id": " partnerOrderId2140",
  "state": "acknowledged",
  "completionDate": "2019-05-16T13:00:57+0200",
  "externalReference": {
    "id": "12",
    "type": "orange"
  },
  "orderItem": [
    {
      "id": "12",
      "state": "acknowledged",
      "productRef": {
        "id": "fleetId356",
        "userServiceQuantity": "2"
      },
      "action": "add",
      "productOffering": {
        "name": "offer Name to activate",
        "externalReference": {
          "id": "APP02XYZ01",
          "type": "orange"
        }
      }
    }
  ],
  "requestedStartDate": "2019-05-16T13:00:49+0200",
  "orderDate": "2019-05-16T13:00:49+0200",
  "category": "production",
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "postalAddress": {
      "street1": "2 RUE JEAN LURCAT",
      "postcode": "92240",
      "country": "FR",
      "city": "MALAKOFF",
      "stateOrProvince": ""
    },
    "externalReference": {

```

```

    "id": "customer14",
    "type": "orange"
  },
  "characteristic": [],
  "role": "customer",
  "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
  "registrationNumber": {
    "id": "572 059 459 00063",
    "type": "SIRET",
    "issuingAuthority": "INSEE"
  }
},
"relatedContact": [
  {
    "externalReference": {
      "type": "orange",
      "id": "4"
    },
    "givenName": "Virginie",
    "familyName": "LEDOYEN",
    "email": "v.ledoyen@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": "06 86 01 44 17"
    },
    "role": "customerFleetManager"
  },
  {
    "externalReference": {
      "type": "orange",
      "id": "5"
    },
    "givenName": "Brigitte",
    "familyName": "BARDOT",
    "email": "b.bardot@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": ""
    },
    "role": "customerFleetManager"
  }
]
}

```

B) the result is supplied in an event :

POST <https://ope.apibackbone.orange.com/mba2/productordering/v2/event>

```

{
  "id": "3e7ca12c-6615-485c-a765-dcb57ae10faa",
  "time": "2015-09-28T18:42:23+0200",
  "type": "completedStateNotification",
  "resource": {
    "id": "partnerOrderId2140",
    "state": "completed",
    "completionDate": "2019-05-16T13:00:57+0200",
    "externalReference": {
      "id": "12",
      "type": "orange"
    },
  },
  "orderItem": [
    {
      "id": "12",
      "state": "completed",
    }
  ]
}

```

```

"productRef": {
  "id": "fleetId356",
  "userServiceQuantity": "2"
},
"action": "add",
"productOffering": {
  "name": "offer Name to activate",
  "externalReference": {
    "id": "APP02XYZ01",
    "type": "orange"
  }
}
}
],
"requestedStartDate": "2019-05-16T13:00:49+0200",
"orderDate": "2019-05-16T13:00:49+0200",
"category": "production",
"relatedOrganization": {
  "id": "partnerCustomerId382",
  "postalAddress": {
    "street1": "2 RUE JEAN LURCAT",
    "postcode": "92240",
    "country": "FR",
    "city": "MALAKOFF",
    "stateOrProvince": ""
  },
  "externalReference": {
    "id": "customer14",
    "type": "orange"
  },
  "characteristic": [],
  "role": "customer",
  "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
  "registrationNumber": {
    "id": "572 059 459 00063",
    "type": "SIRET",
    "issuingAuthority": "INSEE"
  }
},
"relatedContact": [
  {
    "externalReference": {
      "type": "orange",
      "id": "4"
    },
    "givenName": "Virginie",
    "familyName": "LEDOYEN",
    "email": "v.ledoyen@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": "06 86 01 44 17"
    },
    "role": "customerFleetManager"
  },
  {
    "externalReference": {
      "type": "orange",
      "id": "5"
    },
    "givenName": "Brigitte",
    "familyName": "BARDOT",
    "email": "b.bardot@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",

```

```

    "sn": ""
  },
  "role": "customerFleetManager"
}
]
}
}

```

- C) response for the event request :

Http response code 201

```

{
  "id": "3e7ca12c-6615-485c-a765-dcb57ae10faa",
  "time": "2015-09-28T18:42:23+0200",
  "type": "completedStateNotification",
}

```

4.1.4 4 - Loading all licenses created for the customer (see management of user services)

See chapter “Management of user services”

4.1.5 5 - Refresh information of all licenses displayed to customer (see management of user services)

See chapter “Management of user services”

4.1.6 6 - Update the license changed by customer (see management of user services)

See chapter “Management of user services”

Phase of deployment of the customer order (the user services that were not activated in the test phase must be activated) :

4.1.7 7- Content of next orders (reassort):

Request provides the number of licenses to activate and the fleet id (productRefId) provided during the first order (for some partners if such information is required, it also provides detailed informations for each license).
 Response provides: status of the order and a comment used if problem.

The rule is:

An ID of the customers’s fleet (productRefId) known by Orange is used in the request:

- If possible, the user services are attached to this productRefId.
- Else the user services are attached to another productRefId (either existing or new one).

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner to trace the order		N	O/A	O/A
externalReference - JSON node - the reference of the order used by	type – string - type of externalReference (orange) (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
	id- string- id of the externalReference (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
Orange (mandatory)				
category - string- to indicate if the order is for test objective or definitive deployment (mandatory)		O = production (mandatory)	O/I (mandatory)	O/I (mandatory)
state - string- status of the order (mandatory)		O = initialized (mandatory)	O/M = acknowledged (mandatory)	O/M = completed ou failed (mandatory)
note – JSON node- to add comment on an order to ease the understanding of the order state (optional)	text - string - text of the comment		Optional	O/M (optional) (optional)
	date – dateTime - date and time of the comment		Optional	O/M (optional) (optional)
	author – string - author of the comment		Optional	O/M (optional) (optional)
orderDate - string- date of the creation of the order on Orange side (mandatory)		O (mandatory)	O/I (mandatory)	O/I (mandatory)
completionDate - string- date to precise by partner to indicate when the order was processed		N	N	O/A (mandatory)
requestedStartDate – string- date agreed with customer to start activation of the application (mandatory)		O (mandatory)	O/I (mandatory)	O/I (mandatory)
orderItem - array of JSON node- content of the order (mandatory)	id - string- identifier of the order line (set by Orange) (mandatory)		O (mandatory)	O/I (mandatory)
	state – string – state of the order line (mandatory)		O = initialized (mandatory)	O/M = acknowledged (mandatory)
	action – string – type of movement required in the order <ul style="list-style-type: none"> 'add' when the productRef id has to be created (first order) or when new services are required inside an existing productRef id, 'modify' when all user services of productRef id have to be migrated to a new type of application provided by ProductOffering, 'delete' when the customer stops the contrat for all userServices (mandatory)		O = add (mandatory)	O/I (mandatory)
	productRef - JSON node ProductRef – details on the service fleet concerned by the orderitem (mandatory)	id – string - Unique identifier of the userService Fleet then used to retrieve list of produced user Services (mandatory)	O Value received at first order (mandatory)	O/I or O/M - O/I in general (production licences are added in same fleet as the test licences) -O/M if partner generates new product Ref id at each order (mandatory)

Ressource ProductOrder			supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
					Ref id at each order (mandatory)
		userServiceQuantity – string- number of userServices to create. Filled only for new user services orders. This is the delta quantity to add (ex: if customer has already 90 userService and want to add 10 new user Services, then this string will contain 10) (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
		characteristic –array of JSON node of ProductRefCharacteristic - parameters to apply to the fleet (ex: language, diskspace, SLA level). These characteristics are defined at the moment product offering is defined between partner and orange (optional)	Optional	Optional	Optional
		name - string – name to identify the characteristic value – string- value of the characteristic			
	productOffering – JSON node ProductOffering - offer (mandatory)	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue	O (mandatory)	O/I (mandatory)	O/I (mandatory)
		type – string - type of externalReference (orange) (mandatory)			
		id - string- id of the externalReference (mandatory)			
		name – string – short description of the offer in the Orange catalogue (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
relatedOrganization – JSON node Organization – company information (mandatory)	id – string – id of company (mandatory)		O/I Value received at customer creation (mandatory)	O/I (mandatory)	O/I (mandatory)
	externalReference – JSON node ExternalReference – see first line (mandatory)	type – string - type of externalReference (orange) (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
		id - string- id of the externalReference (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
	tradingName - string – name of the company (mandatory)		O (mandatory)	O/I (mandatory)	O/I (mandatory)

Resource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
(Optional)	registrationNumber – JSON node Identification – registration number	type – string – type of registration number (SIREN, SIRET, ...) mandatory if registrationNumber node is provided)	Optional	O/I Optional	O/I Optional
		id – string – value of registration number mandatory if registrationNumber node is provided)	O Optional	O/I Optional	O/I Optional
		issuingAuthority – string- the organization which delivered the registration number mandatory if registrationNumber node is provided)	O Optional	O/I Optional	O/I Optional
(mandatory)	postalAddress - JSON node PostalAddressContactMedium – address of the company	streetNumber – JSON node of StreetNumber (Optional) number – string – number in the street mandatory if streetNumber node is provided	N	Optional	Optional
		letter – string – letter to complete number optional	N	Optional	Optional
		postcode – string – postal code (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
		stateOrProvince – string- name of the state of province optional	Optional	O/I (optional)	O/I (optional)
		street1 – string – first line of address (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
		street2 – string- second line of address optional	Optional	O/I (optional)	O/I (optional)
		country – string - country code (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
		city – string – city name (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)
	role – string – role of the company (customer, customerSubcontractor, other) (mandatory)	O (mandatory)	O/I (mandatory)	O/I (mandatory)	
characteristic – array of JSON node PartyCharacteristic – to precise details (such as APE code) (Optional)	name - string – name to identify the characteristic	Optional	O/I (optional)	O/I (optional)	
	value – string- value of the characteristic				
relatedContact – array of JSON	givenName – string – first name of the contact (mandatory if relatedContact node is provided)	O	O/I	O/I	

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>		
node Individual - list of contacts in company to proceed the order (max 5) Optional	familyName – string – family name of the contact (mandatory if relatedContact node is provided)		O	O/I	O/I	
	email - string – email of the contact (mandatory if relatedContact node is provided)		O	O/I	O/I	
	mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the contact optional	cc – string - international country prefix, ex 33 for France (mandatory if mobileNumber node is provided)	Optional	O/I (optional)	O/I (optional)	
		sn – string - local phone number including local prefix,				
	fixedTelephoneNumber - JSON node of TelephoneNumber – fixed telephone number of the contact	cc – string - international country prefix, ex 33 for France	Optional	O/I (optional)	O/I (optional)	
		sn – string - local phone number including local prefix,				
	postalAddress – JSON node of PostalAddressContactMedium – address of the contact mandatory	streetNumber – JSON node of StreetNumber (optional)	number – string – number in the street (mandatory if streetNumber node is provided)	N	O/I (optional)	O/I (optional)
			letter – string – letter to complete number (optional)	N	O/I (optional)	O/I (optional)
		postcode – string – postal code (mandatory)		O mandatory	O/I mandatory	O/I mandatory
		stateOrProvince – string- name of the state of province (optional)		N optional	O/I (optional)	O/I (optional)
		street1 – string – first line of address (mandatory)		O mandatory	O/I mandatory	O/I mandatory
		street2 – string- second line of address (optional)		optional	O/I (optional)	O/I (optional)
		country – string - country code (mandatory)		O mandatory	O/I mandatory	O/I mandatory
		city – string – city name (optional)		O mandatory	O/I mandatory	O/I mandatory
role - string – role of the contact in the order management (customerFleetManager, customerProjectManager, or customerSignatory) mandatory		O mandatory	O/I mandatory	O/I mandatory		
characteristic – array of JSON node of PartyCharacteristic - to precise function in company optional	name - string – name to identify the characteristic		optional	O/I (optional)	O/I (optional)	
	value – string- value of the characteristic					

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
	externalReference - JSON node of ExternalReference e – id of contact in orange system mandatory	type – string - type of externalReference (orange) mandatory	O mandatory	O/I mandatory	O/I mandatory
		id - string- id of the externalReference mandatory			

Note: *in this release, the order request contains only one order item.*

8- Result of the activation of the user services of the customer

In the case of a synchronous result, the step 8 does not exist, the result is returned in the synchronous response of step 7.

For an asynchronous result :

- The partner will post an event with the following data
 - The ID of the fleet of user services (productRefId). This id may be equal or different from the previous ID. Orange accepts both modes.
 - The order status is 'completed' or 'failed'. If the response is failed, a reason for this failed can be given in the field note.
- The event response is a simple http code.

Ressource event of ProductOrdering	supplied in the request by the partner	supplied in the synchronous response
id – string- the id generated by Orange for each event (optional)	Optional	Optional
Type - enum: completedStateNotification, failedStateNotification (mandatory)	O	O/I
Time – dateTime (mandatory)	O	O/I
resource : productOrder resource (mandatory)	O: same data as in previous synchronous use case (last column of previous array)	N

Note: in this release, the order request contains only one order item.

Example of next orders for an existing customer (reassort): request

In the example the customer wants to add 5 “offer Name to activate”

POST <https://<address of partner proxy>/mba/productordering/v2/productOrder>

```

{
  "externalReference": {
    "type": "orange",
    "id": "22"
  },
  "category": "production",
  "state": "initialized",
  "orderDate": "2019-05-16T13:00:49+0200",
  "requestedStartDate": "2019-05-16T13:00:49+0200",
  "orderItem": [
    {
      "id": "22",
      "state": "initialized",
      "action": "add",
      "productRef": {
        "id": "fleetId356",
        "userServiceQuantity": "1"
      },
      "productOffering": {
        "name": "offer Name to activate",
        "externalReference": {
          "type": "orange",

```

```

        "id": "APP02XYZ01"
    }
}
],
"relatedOrganization": {
    "id": "partnerCustomerId382",
    "externalReference": {
        "type": "orange",
        "id": "customer14"
    },
    "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
    "registrationNumber": {
        "type": "SIRET",
        "id": "572 059 459 00063",
        "issuingAuthority": "INSEE"
    },
    "postalAddress": {
        "postcode": "92240",
        "stateOrProvince": "",
        "street1": "2 RUE JEAN LURCAT",
        "country": "FR",
        "city": "MALAKOFF"
    },
    "role": "customer",
    "characteristic": []
},
"relatedContact": [
    {
        "externalReference": {
            "type": "orange",
            "id": "4"
        },
        "givenName": "Virginie",
        "familyName": "LEDOYEN",
        "email": "v.ledoyen@malakoff-ha.fr",
        "mobileNumber": {
            "cc": "33",
            "sn": "06 86 01 44 17"
        },
        "role": "customerFleetManager"
    },
    {
        "externalReference": {
            "type": "orange",
            "id": "5"
        },
        "givenName": "Brigitte",
        "familyName": "BARDOT",
        "email": "b.bardot@malakoff-ha.fr",
        "mobileNumber": {
            "cc": "33",
            "sn": ""
        },
        "role": "customerFleetManager"
    }
]
}

```

Example of creation of next orders: synchronous result

Note: in this example, the partner returns the same productRefId. However, the rule is:

- If possible, the user services are attached to the productRefId supplied as input in the request.



- Else the user services are attached to another productRefId (either existing or new one) and the new value of productRefId is provided in the response.

Http code 201

```
{
  "id": "partnerOrderId3021",
  "state": "completed",
  "completionDate": "2019-05-16T13:00:57+0200",
  "externalReference": {
    "id": "22",
    "type": "orange"
  },
  "orderItem": [
    {
      "id": "22",
      "state": "completed",
      "productRef": {
        "id": "fleetId356",
        "userServiceQuantity": "1"
      },
      "action": "add",
      "productOffering": {
        "name": "offer Name to activate",
        "externalReference": {
          "id": "APP02XYZ01",
          "type": "orange"
        }
      }
    }
  ],
  "requestedStartDate": "2019-05-16T13:00:49+0200",
  "orderDate": "2019-05-16T13:00:49+0200",
  "category": "production",
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "postalAddress": {
      "street1": "2 RUE JEAN LURCAT",
      "postcode": "92240",
      "country": "FR",
      "city": "MALAKOFF",
      "stateOrProvince": ""
    },
    "externalReference": {
      "id": "customer14",
      "type": "orange"
    },
    "characteristic": [],
    "role": "customer",
    "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
    "registrationNumber": {
      "id": "572 059 459 00063",
      "type": "SIRET",
      "issuingAuthority": "INSEE"
    }
  },
  "relatedContact": [
    {
      "externalReference": {
        "type": "orange",
        "id": "4"
      },
      "givenName": "Virginie",
      "familyName": "LEDOYEN",
    }
  ]
}
```

```

    "email": "v.ledoyen@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": "06 86 01 44 17"
    },
    "role": "customerFleetManager"
  },
  {
    "externalReference": {
      "type": "orange",
      "id": "5"
    },
    "givenName": "Brigitte",
    "familyName": "BARDOT",
    "email": "b.bardot@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": ""
    },
    "role": "customerFleetManager"
  }
]
}

```

Example of creation of the first customer order: asynchronous mode: response, then event request & response

A) http response code 201

```

{
  "id": " partnerOrderId3021",
  "state": "acknowledged",
  "completionDate": "2019-05-16T13:00:57+0200",
  "externalReference": {
    "id": "22",
    "type": "orange"
  },
  "orderItem": [
    {
      "id": "22",
      "state": "acknowledged",
      "productRef": {
        "id": "fleetId356",
        "userServiceQuantity": "1"
      },
      "action": "add",
      "productOffering": {
        "name": "offer Name to activate",
        "externalReference": {
          "id": "APP02XYZ01",
          "type": "orange"
        }
      }
    }
  ],
  "requestedStartDate": "2019-05-16T13:00:49+0200",
  "orderDate": "2019-05-16T13:00:49+0200",
  "category": "production",
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "postalAddress": {
      "street1": "2 RUE JEAN LURCAT",
      "postcode": "92240",

```

```

    "country": "FR",
    "city": "MALAKOFF",
    "stateOrProvince": ""
  },
  "externalReference": {
    "id": "customer14",
    "type": "orange"
  },
  "characteristic": [],
  "role": "customer",
  "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
  "registrationNumber": {
    "id": "572 059 459 00063",
    "type": "SIRET",
    "issuingAuthority": "INSEE"
  }
},
"relatedContact": [
  {
    "externalReference": {
      "type": "orange",
      "id": "4"
    },
    "givenName": "Virginie",
    "familyName": "LEDOYEN",
    "email": "v.ledoyen@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": "06 86 01 44 17"
    },
    "role": "customerFleetManager"
  },
  {
    "externalReference": {
      "type": "orange",
      "id": "5"
    },
    "givenName": "Brigitte",
    "familyName": "BARDOT",
    "email": "b.bardot@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": ""
    },
    "role": "customerFleetManager"
  }
]
}

```

- *B) the result is supplied in an event*

POST <https://ope.apibackbone.orange.com/mba2/productordering/v2/event>

```

{
  "id": "3e7ca12c-6615-485c-a765-dcb57ae10faa",
  "time": "2015-09-28T18:42:23+0200",
  "type": "completedStateNotification",
  "resource": {
    "id": " partnerOrderId3021",
    "state": "completed",
    "completionDate": "2019-05-16T13:00:57+0200",
    "externalReference": {
      "id": "22",
      "type": "orange"
    }
  }
}

```

```

},
"orderItem": [
  {
    "id": "22",
    "state": "completed",
    "productRef": {
      "id": "fleetId356",
      "userServiceQuantity": "1"
    },
    "action": "add",
    "productOffering": {
      "name": "offer Name to activate",
      "externalReference": {
        "id": "APP02XYZ01",
        "type": "orange"
      }
    }
  }
],
"requestedStartDate": "2019-05-16T13:00:49+0200",
"orderDate": "2019-05-16T13:00:49+0200",
"category": "production",
"relatedOrganization": {
  "id": "partnerCustomerId382",
  "postalAddress": {
    "street1": "2 RUE JEAN LURCAT",
    "postcode": "92240",
    "country": "FR",
    "city": "MALAKOFF",
    "stateOrProvince": ""
  },
  "externalReference": {
    "id": "customer14",
    "type": "orange"
  },
  "characteristic": [],
  "role": "customer",
  "tradingName": "SA IMMOB ECONOMIE MIXTE MALAKOFF",
  "registrationNumber": {
    "id": "572 059 459 00063",
    "type": "SIRET",
    "issuingAuthority": "INSEE"
  }
},
"relatedContact": [
  {
    "externalReference": {
      "type": "orange",
      "id": "4"
    },
    "givenName": "Virginie",
    "familyName": "LEDOYEN",
    "email": "v.ledoyen@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": "06 86 01 44 17"
    },
    "role": "customerFleetManager"
  },
  {
    "externalReference": {
      "type": "orange",
      "id": "5"
    }
  }
],

```

```
    "givenName": "Brigitte",
    "familyName": "BARDOT",
    "email": "b.bardot@malakoff-ha.fr",
    "mobileNumber": {
      "cc": "33",
      "sn": ""
    },
    "role": "customerFleetManager"
  }
]
}
```

- C) response for the event request

Http response code 201

```
{
  "id": "3e7ca12c-6615-485c-a765-dcb57ae10faa",
  "time": "2015-09-28T18:42:23+0200",
  "type": "completedStateNotification",
}
```

9- Loading all licenses created for the customer

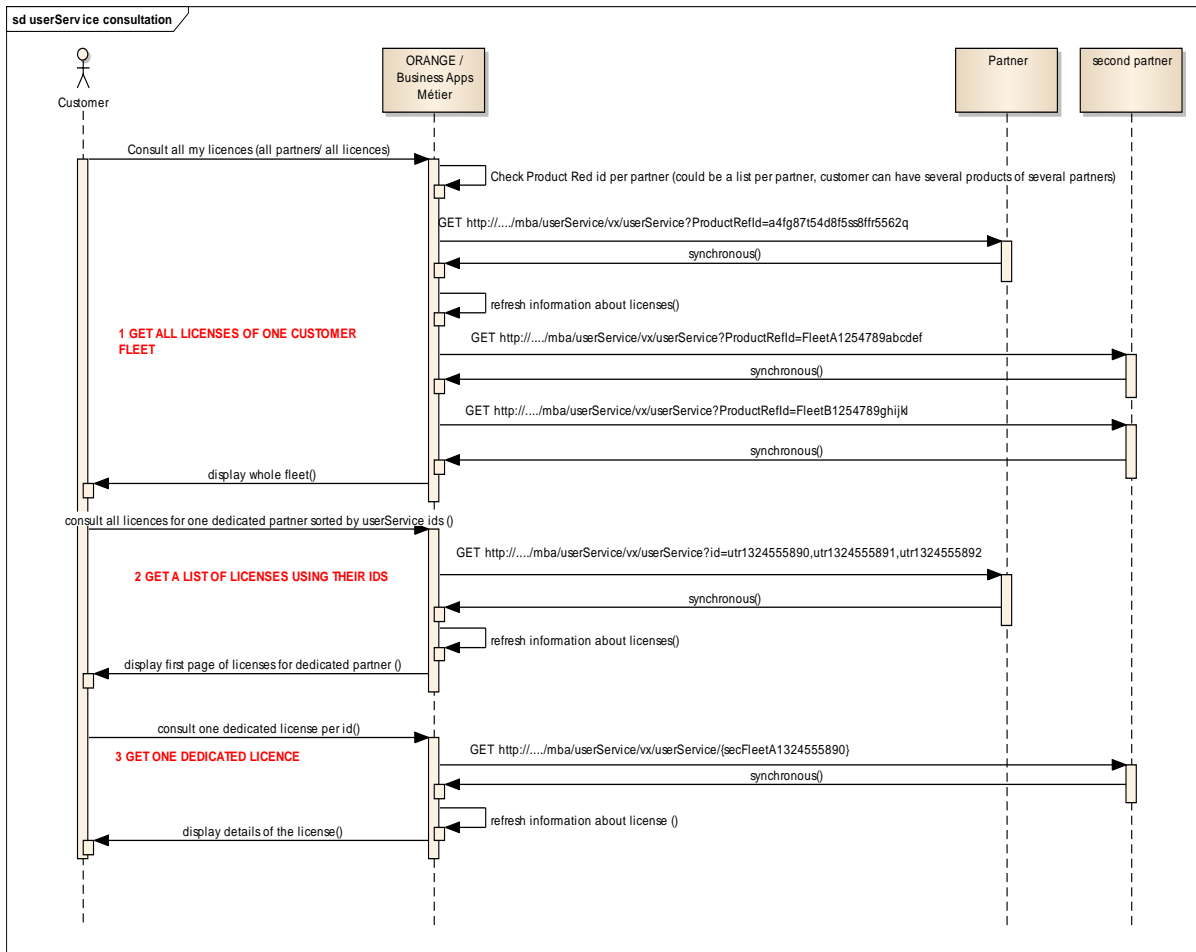
See the chapter « management of user services »

4.2 Management of user services from Orange request

4.2.1 Consultation of user services : user service API

There are 3 types of consultation of user services:

- **1: Get all licences for a fleet ID (productRefId)**
- **2: Gets a list of licences using their ids**
- **3 : Get a specific licence**



Note : seul l'appel avec un identifiant de flotte est implémenté

The ID parameters are supplied in the query part of the URI:

- GET by productRefId: To get all user services of a fleet identified by its productRef id (productRef id is supplied by the partner as a result of the customer order).

Consequently, in this chapter the column "supplied in the request" is empty because no resource is supplied, only the query parameter.

Ressource userService		request : empty body	supplied in the synchronous response
id – string- the id generated by partner when the end user service is created (mandatory)			O/A (mandatory)
initialOrderId – string – id of the initial order provided by Orange (externalReference) at the origin of the license creation (mandatory)			O/A (mandatory)
externalState - string- status of the userService on orange side (active, suspended, inactive, deleted), (optional) It is expected that the partner sends back the orange state to avoid trouble of customer billing.			Optional
state - string- technical status of the userService on partner side (active, inactive), Inactive state on partner side correspond to suspended, inactive or deleted on Orange side (mandatory)			O/A (mandatory)
note – JSON node of Note- to add comment on a userService to ease the understanding of the userService state Not provided	text - string - text of the comment		N
	date – dateTime - date and time of the comment		N
	author – string - author of the comment		N
updateDate - string- date of the update of the userService on partner side, if several updates occurred (on end user, on rights, on realizing resource, the partner provides the more recent date) (mandatory)			O/A (mandatory)
updateState – string - state of update of user service (used only when the updating of user services): initialized, acknowledged, completed or failed Not provided			N
validFor - JSON node of ValidFor to specify the starting date and the ending date of the userService availability (mandatory)	startDate – string – start of validity for the userService (mandatory)		O/A (mandatory)
	endDate – string – end of validity for the userService optional		O/A optional
relatedProductRefId – string- the id provided in the response of POST productOrder (it is the identifier of the application of the customer). Unique identifier of the userService Fleet (mandatory)			O/A (mandatory)
relatedProductOfferingOperation – JSON node of ProductOfferingOperation - the operation and the reference of offer (mandatory)	action – string – action done on productOffering - «swap» when a productOffering is changed on a userService - «noChange» if the information about productOffering was not changed, (mandatory)		O/A = noChange (mandatory)
	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue (mandatory)		O/A (mandatory)
	type – string - type of externalReference (orange) (mandatory)		
	id - string- id of the externalReference (mandatory)		
name – string – short description of the offer in the Orange catalogue mandatory			O/A (mandatory)
relatedEndUserConfigurationOperation –JSON node of EndUserConfigurationOperation– the information related to end user linked to user Service (action identifies the operation made on end user) Optional	endUserOperation – JSON node of EndUserOperation - operation to realize on end user (optional)	action – string – action done on end user - “add” when a userService was linked to endUser, - “modify” when an existing end user linked a userService was updated (change of name, email for ex), - “swap” <i>not used</i> - “noChange” if the information about end user were not changed, - “delete” when an end user was deleted on an existing userService (no more end user is specified) (mandatory if endUserOperation node is provided)	
		endUser – JSON node of Individual .. mandatory if endUserOperation node is provided	id – string – id of end user inside partner IS (mandatory if endUser node is provided)
		givenName – string – first name of the end user (optional)	O/A (optional, provided if known)
	familyName – string – family name of the		

Ressource userService			request : empty body	supplied in the synchronous response
		end user mandatory if endUser node is provided		
		email - string – email of the end user (optional)		
		mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the end user Optional	cc – string - international country prefix, ex 33 for France (mandatory if mobileNumber node is provided)	
			sn – string - local phone number including local prefix, (mandatory if mobileNumber node is provided)	
		fixedTelephoneNumber - JSON node of TelephoneNumber – fixed telephone number of the end user Optional	cc – string - international country prefix, ex 33 for France (mandatory if fixedTelephoneNumber node is provided)	
			sn – string - local phone number including local prefix, ex (mandatory if fixedTelephoneNumber node is provided)	
		postalAddress – JSON node of PostalAddressContactMedium – address of the end user Optional	streetNumber – JSON node of StreetNumber : Optional number mandatory if streetNumber node is provided	
			letter Optional	
			postcode – string – postal code mandatory if postalAddress node is provided	
			stateOrProvince – string- name of the state of province optional	
			street1 – string – first line of address mandatory if postalAddress node is provided	
			street2 – string- second line of address optional	
			country – string - country code mandatory if postalAddress node is provided	
			city – string – city name mandatory if postalAddress node is provided	

Ressource userService			request :	supplied in the
			empty body	synchronous response
		<p>externalReference - JSON node of ExternalReference - id of end user in orange system Optional</p>	<p>is provided</p> <p>type – string - type of externalReference (orange) mandatory if externalReference node is provided</p>	
			<p>id- string- id of the externalReference mandatory if externalReference node is provided</p>	
	<p>realizingResourceOperation – JSON node of RealizingResourceOperation – operation to realize on the technical support to deliver the service. Optional</p>	<p>action – string – action done on ResourceOperation</p> <ul style="list-style-type: none"> - "add" not used - "modify" when value of technical support is changed - "swap" not used - "noChange" if no change is done on existing technical support - "delete" not used <p>mandatory if realizingResourceOperation node is provided</p>		<p>O/A = noChange</p>
		<p>realizingResource: JSON node of RealizingResource – the technical support information Optional</p>	<p>name – string - name of realizing resource (ex: mobileNumber, URL, email, IMEI, ...) mandatory if realizingResource node is provided</p>	<p>O/A (optional)</p>
		<p>value – array of JSON node RealizingResourceCharacteristic – value of realizing resource mandatory if realizingResource node is provided</p>	<p>name- string – name of the value part (ex: sn for mobile number or URL prefix or SSL or authorized) mandatory if realizingResource node is provided</p>	
			<p>value – string – value of the value part (ex: '0675846745' for sn, 'O or N' for SSL and authorized) mandatory if realizingResource node is provided</p>	
	<p>relatedRightOperation – JSON node of RightOperation–login or password of user Service was changed (even if password is not provided in the interface), if the password was changed a «modify» action should be set Optional</p>	<p>action – string – action done on right access for the userService</p> <ul style="list-style-type: none"> - "add" not used - "modify" not used - "noChange" if the information about login or password was not changed, - "resetLogin" when the required operation is to resetlogin - "resetPwd" if the required operation is to resetPwd <p>mandatory if relatedRightOperation node is provided</p>		<p>O/A = noChange</p>
		<p>loginMap- JSON node of LoginKeyValue string – login value</p>	<p>key – string- field used for end user login</p> <ul style="list-style-type: none"> - 'login' for login field - 'organizationCode' for a code generated for enterprise customer (same used for all end users and specific to a customer enterprise) <p>mandatory if relatedRightOperation node is provided</p>	<p>O/A (optional)</p>
		<p>mandatory if relatedRightOperation node is provided</p>	<p>value – string – value corresponding to the key (login value if key = login, customer enterprise login code if key = organizationCode) mandatory if relatedRightOperation node is provided</p>	
		<p>email- string- email to use to send the change done on loginMap structure (could be directly end user email or could be the email of userService fleet manager depending on enterprise customer internal organization) Optional</p>		<p>N</p>
	<p>relatedServiceCharacteristicOperation –</p>	<p>action – string – action done on ServiceCharacteristic</p> <ul style="list-style-type: none"> - "add" not used 		<p>O/A= (optional, noChange)</p>

Ressource userService		request :	supplied in the
		empty body	synchronous response
array of JSON node of ServiceChara cteristicOpera tion– the information related to service characteristics was changed Optional	- "modify" not used - "noChange" if no change is done on existing service characteristic - "delete" not used mandatory if relatedServiceCharacteristicOperation node is provided		
	Characteristic: Array of JSON node of serviceCharacteristic – name and value of the user service characteristic mandatory if relatedServiceCharacteristicOperation node is provided	name- string – name of the value part (ex: SLA for level of service support on user service) mandatory if relatedServiceCharacteristicOperation node is provided	O/A (optional, provided if known)
		value – string – value of the service characteristic (ex: GOLD for SLA) mandatory if relatedServiceCharacteristicOperation node is provided	

Example of consultation by productRefId: request and response

request : GET <https://<address of partner proxy>/mba/userservice/v2/userService?productRefId=fleetId356>

http code 200 (example with 3 user services linked to the productRefId corresponding to first order with 2 licences and next order with 1 licence requested in userServiceQuantity)

The 2 first userService have initialOrderId = 12 as for first order, externalReference = 12. The 3rd userService has initialOrderId = 22 as for next order, externalReference = 22.

```
[
  {
    "id": "userServiceIdNumber1",
    "initialOrderId": "12",
    "state": "active",
    "relatedProductRefId": "fleetId356",
    "relatedProductOfferingOperation": {
      "action": "noChange",
      "externalReference": {
        "type": "orange",
        "id": "APP02XYZ01"
      }
    },
    "name": "offer Name to activate"
  },
  "relatedEndUserConfigurationOperation": {
    "endUserOperation": {
      "action": "noChange",
      "endUser": {
        "id": "5c7965c222ce888ff13470",
        "givenName": "Administrator",
        "mobileNumber": null,
        "fixedTelephoneNumber": null,
        "familyName": "Administrator",
        "email": "l.btein@cdk-fi.fr",
        "postalAddress": {
          "streetNumber": null,
          "postcode": "17160",
          "stateOrProvince": null,
          "street1": "6 BD DE L'EUROPE",
          "street2": null,
          "country": "FR",
          "city": "MATHA"
        }
      }
    },
    "externalReference": null
  }
]
```

```

    }
  },
  "realizingResourceOperation": {
    "action": "noChange",
    "realizingResource": {
      "name": "DMS",
      "value": [
        {
          "name": "url",
          "value": "assystel.mycompany.com"
        },
        {
          "name": "key",
          "value": "FO9150Y55QW366519D3FI77W1101130190"
        },
        {
          "name": "onpremise",
          "value": "false"
        },
        {
          "name": "version",
          "value": "6.10.3.f2c4a59"
        }
      ]
    }
  }
},
"relatedRightOperation": {
  "action": "noChange",
  "loginMap":
  {
    "key": "login",
    "value": "l.btein@cdk-fi.fr"
  }
},
"validFor": {
  "startDate": "2019-05-16T12:00:49+0200"
},
"updateDate": "2019-05-16T12:00:50+0200"
},
{
  "id": "userServiceIdNumber2",
  "initialOrderId": "12",
  "state": "active",
  "relatedProductRefId": "fleetId356",
  "relatedProductOfferingOperation": {
    "action": "noChange",
    "externalReference": {
      "type": "orange",
      "id": "APP02XYZ01"
    },
    "name": "offer Name to activate"
  },
  "relatedRightOperation": {
    "action": "noChange",
    "loginMap":
    {
      "key": "login",
      "value": "XY9901260"
    }
  }
},
"validFor": {

```

```

    "startDate": "2019-05-16T12:00:49+0200"
  },
  "updateDate": "2019-05-16T12:00:50+0200"
},
{
  "id": "userServiceIdNumber",
  "initialOrderId": "22",
  "state": "active",
  "relatedProductRefId": "fleetId356",
  "relatedProductOfferingOperation": {
    "action": "noChange",
    "externalReference": {
      "type": "orange",
      "id": "APP02XYZ01"
    }
  },
  "name": "offer Name to activate"
},
"relatedRightOperation": {
  "action": "noChange",
  "loginMap":
    {
      "key": "login",
      "value": "MA9906610"
    }
},
"validFor": {
  "startDate": "2019-05-16T12:00:49+0200"
},
"updateDate": "2019-05-16T12:00:50+0200"
}
]

```

Example of a GET with a list of user service IDs: request and response

Request: GET <https://<address of partner proxy>/mba/userservice/v2/userService?id=userServiceIdNumber1,userServiceIdNumber2,userServiceIdNumber3>

The response is the same as the response of the request by ProductRefid

Example of a GET for a user service identified by its id: request and response

Request: GET <https://<address of partner proxy>/mba/userservice/v2/userService/userServiceIdNumber1>

http return code 200

```

{
  "id": "userServiceIdNumber1",
  "initialOrderId": "12",
  "state": "active",
  "relatedProductRefId": "fleetId356",
  "relatedProductOfferingOperation": {
    "action": "noChange",
    "externalReference": {
      "type": "orange",
      "id": "APP02XYZ01"
    }
  },
  "name": "offer Name to activate"
},
"relatedEndUserConfigurationOperation": {
  "endUserOperation": {
    "action": "noChange",

```

```

    "endUser": {
      "id": "5c7965c222ce888ff13470",
      "givenName": "Administrator",
      "mobileNumber": null,
      "fixedTelephoneNumber": null,
      "familyName": "Administrator",
      "email": "l.btein@cdk-fi.fr",
      "postalAddress": {
        "streetNumber": null,
        "postcode": "17160",
        "stateOrProvince": null,
        "street1": "6 BD DE L'EUROPE",
        "street2": null,
        "country": "FR",
        "city": "MATHA"
      },
      "externalReference": null
    },
    "realizingResourceOperation": {
      "action": "noChange",
      "realizingResource": {
        "name": "DMS",
        "value": [
          {
            "name": "url",
            "value": "assystel.mycompany.com"
          },
          {
            "name": "key",
            "value": "FO9150Y55QW366519D3FI77W1101130190"
          },
          {
            "name": "onpremise",
            "value": "false"
          },
          {
            "name": "version",
            "value": "6.10.3.f2c4a59"
          }
        ]
      }
    },
    "relatedRightOperation": {
      "action": "noChange",
      "loginMap": {
        "key": "login",
        "value": "l.btein@cdk-fi.fr"
      }
    },
    "validFor": {
      "startDate": "2019-05-16T12:00:49+0200"
    },
    "updateDate": "2019-05-16T12:00:50+0200"
  }
}

```

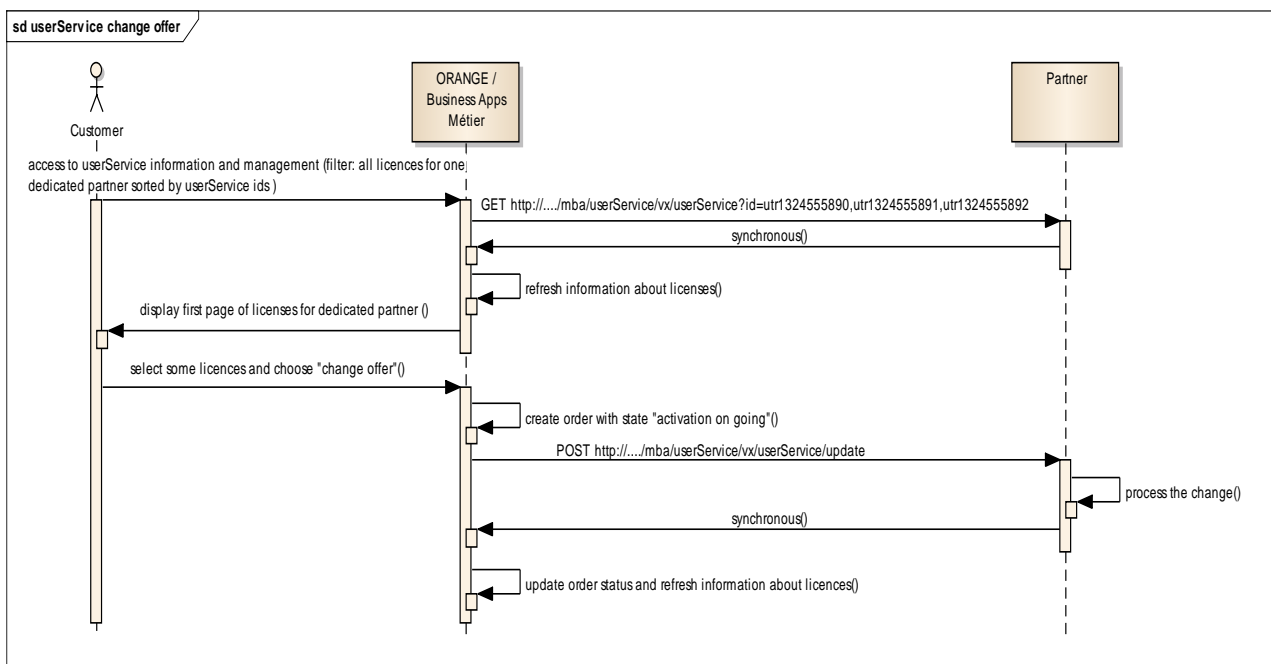
4.2.1 Order new licenses for a customer: product ordering API: see 7- Content of next orders (reassort):

4.2.2 Change the product offering (the offer) of a fleet of licences

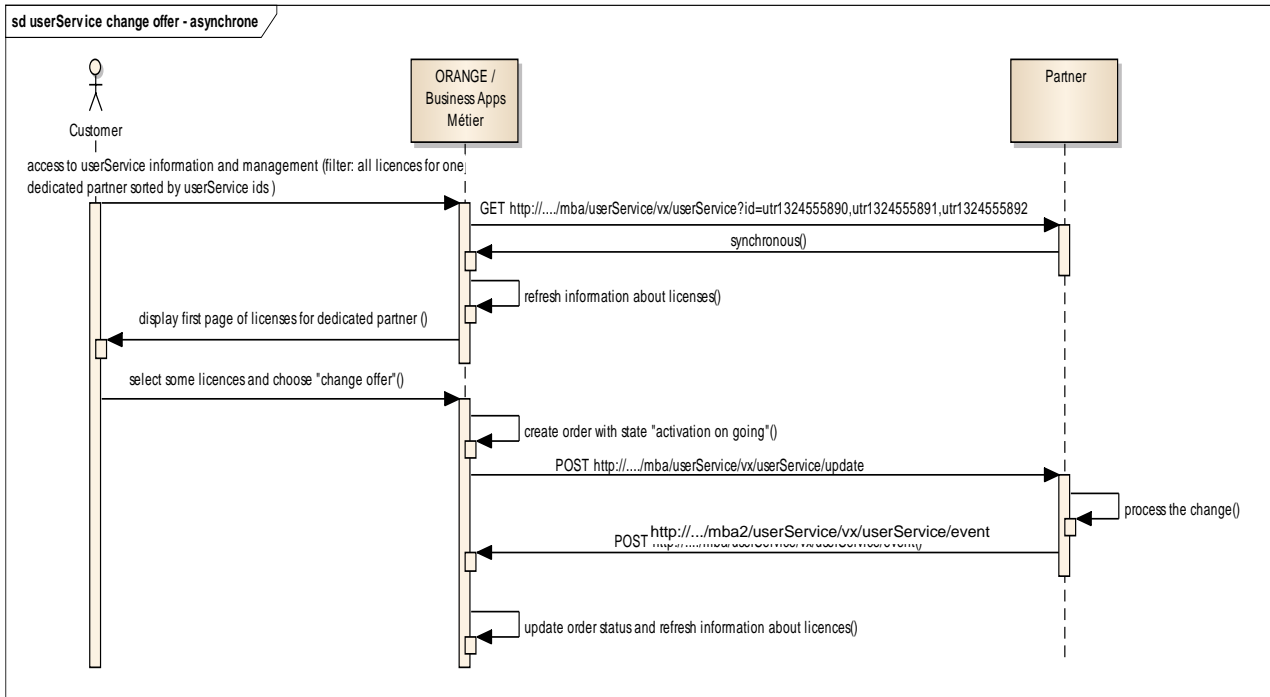
See §next chapter “Change the product offering of one or more user services”, the management is the same.

4.2.3 Change the product offering (the offer) of one or more user services

The body of the update request is the resource `userServiceUpdate` which has a state attribute that indicates either a synchronous result (state = completed or failed) or an asynchronous result (state = acknowledged).



Sequence diagram for changing the product offering of some user services with synchronous result.



Sequence diagram for changing the product offering of some user services with asynchronous result.

(*) Tag in the column “supplied in the request by Orange”

- relatedProductRefId attribute has tag O/I. It means that the value has been obtained by a previous « GET » and is provided in the request by Orange.
- relatedProductOfferingOperation has tag O/M. It means that the current product offering is modified.

Ressource userServiceUpdate		supplied in the request by Orange {*}	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner to trace the user service update		N	O/A mandatory	O/A mandatory
externalReference - JSON node - the reference of the user service update used by Orange mandatory	type – string - type of externalReference (orange) mandatory	O mandatory	O/I mandatory	O/I mandatory
	id- string- id of the externalReference mandatory	O mandatory	O/I mandatory	O/I mandatory
state– string- état de la réponse acknowledged : return receipt service user change requests completed : all service user change requests are performed failed : No request to change user service is performed		N	O = acknowledged mandatory	O = completed or failed mandatory
userService – array – tableau de userService (see array of userServices below) mandatory		see array below		
Ressource userService		supplied in the request by Orange {*}	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner when the end user service is created mandatory		O/I (Retrieved at the GET) mandatory	O/I mandatory	O/I mandatory
externalState - string- status of the userService on orange side (active, suspended, inactive, deleted),		N	Optional	Optional

Ressource userService		supplied in the request by Orange {*}	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>			
it is expected that the partner sends back the orange state to avoid trouble of customer billing. not provided							
state - string- technical status of the userService on partner side (active, inactive), Inactive state on partner side correspond to suspended, inactive or deleted on Orange side.		N	Optional	Optional			
note – JSON node of Note- to add comment on a userService to ease the understanding of the userService state optional	text - string - text of the comment mandatory if note node is provided	N	N	O/A (optional)			
	date – dateTime - date and time of the comment mandatory if note node is provided	N	N	O/A (optional)			
	author – string - author of the comment mandatory if note node is provided	N	N	O/A (optional)			
updateDate - string- date of the update of the userService on partner side, if several updates occurred (on end user, on rights , on realizing resource, the partner provides the more recent date)		N	N	O/A mandatory			
updateState – string - state of update of user service (used only when the updating of user services) : initialized, acknowledged, completed or failed mandatory		O = initialized mandatory	O/M = acknowledged mandatory	O/M = completed ou failed mandatory			
validFor - JSON node of ValidFor to specify the starting date and the ending date of the userService availability not provided	startDateTime – string – beginning of validity for the userService mandatory if validFor node is provided	N	N	N			
	endDateTime – string – end of validity for the userService optional	N	N	N			
relatedProductRefId – string- the id provided in the answer of Post productOrder (it is the identifier of the application of the customer) . Unique identifier of the userService Fleet mandatory		O/I Retrieved at the GET mandatory	O/I mandatory	O/I mandatory			
relatedProductOfferingOperation – JSON node of ProductOfferingOperation - the operation and the reference of offer mandatory	action – string – action done on productOffering - «swap» when a productOffering is changed on a userService - «noChange» if the information about productOffering was not changed, not possible for this usecase mandatory	O/M = Swap mandatory	O/I mandatory	O/I mandatory			
	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue mandatory	O/M mandatory	O/I mandatory	O/I mandatory			
	<table border="1"> <tr> <td>type – string - type of externalReference (orange) mandatory</td> </tr> <tr> <td>id- string- id of the externalReference mandatory</td> </tr> </table> name – string – short description of the offer in the Orange catalogue	type – string - type of externalReference (orange) mandatory	id - string- id of the externalReference mandatory	O/M	O/I	O/I	
type – string - type of externalReference (orange) mandatory							
id - string- id of the externalReference mandatory							
relatedEndUserConfigurationOperation –JSON node of EndUserConfigurationOperation– the information related to end user linked to user Service (action)	endUserOperation – JSON node of EndUserOperation - operation to realize on end user not provided	action – string – action done on end user - “add” when a userService was linked to endUser, - “modify” when an existing end user linked a userService was updated (change of name, email for ex) , - “swap” <i>not used</i> - “noChange” if the information about end user were not changed, - “delete” when an end user was suppressed on an existing userService (no more end user is specified)	N	N			
	<table border="1"> <tr> <td>endUser – JSON node of Individual-</td> <td>id – string – id of end user inside partner IS</td> </tr> <tr> <td></td> <td>givenName – string – first name</td> </tr> </table>	endUser – JSON node of Individual -	id – string – id of end user inside partner IS		givenName – string – first name	N	N
endUser – JSON node of Individual -	id – string – id of end user inside partner IS						
	givenName – string – first name						

Ressource userService			supplied in the request by Orange { }	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
identifies the operation made on end user) not provided			of the end user			
			familyName – string – family name of the end user			
			email - string – email of the end user			
			mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the end user			cc – string - international country prefix, ex 33 for France
						sn – string - local phone number including local prefix,
			fixedTelephoneNumber - JSON node of TelephoneNumber – fixed telephone number of the end user			cc – string - international country prefix, ex 33 for France
						sn – string - local phone number including local prefix, ex
			postalAddress – JSON node of PostalAddressContactMedium – address of the end user			streetNumber – JSON node of StreetNumber : number letter
						stateOrProvince – string- name of the state of province
						street1 – string – first line of address
						street2 – string- second line of address
						country – string - country code
city – string – city name						
externalReference - JSON node of ExternalReference – id of end user in orange system	type – string - type of externalReference (orange)					
	id - string- id of the externalReference					

Ressource userService			supplied in the request by Orange {}	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
	realizingResourceOperation – JSON node of RealizingResourceOperation – operation to realize on the technical support to deliver the service.	action – string – action done on ResourceOperation - “add” not used - “modify” when value of technical support is changed - “swap” not used - “noChange” if no change is done on existing technical support - “delete” not used	N	N	N
	not provided	realizingResource : JSON node of RealizingResource – the technical support information name – string- name of realizing resource (ex: mobileNumber or URL) value – array of JSON node RealizingResourceCharacteristic – value of realizing resource name - string – name of the value part (ex: sn for mobile number or URL prefix or SSL or authorized) value – string – value of the value part (ex: '0675846745' for sn , 'O or N' for SSL and authorized)	N	N	N
relatedRightOperation – JSON node of RightOperation–login or password of user Service was changed (even if password is not provided in the interface, if the password was changed a «modify” action should be set not provided	action – string – action done on right access for the userService - “add” not used - “modify” not used - “noChange” if the information about login or password was not changed, - “resetLogin” when the required operation is to resetlogin - “resetPwd” if the required operation is to resetPwd		N	N	N
	loginMap - JSON node of LoginKeyValue string – login value key – string- field used for end user login - 'login' for login field - 'organizationCode' for a code generated for enterprise customer (same used for all end users and specific to a customer enterprise) value – string – value corresponding to the key (login value if key = login, customer enterprise login code if key = organizationCode)		N	N	N
	email - string- email to use to send the change done on loginMap structure (could be directly end user email or could be the email of userService fleet manager depending on enterprise customer internal organization)				
relatedServiceCharacteristicOperation – array of JSON node of ServiceCharacteristicOperation– the information related to service characteristics was changed not provided	action – string – action done on ServiceCharacteristic - “add” not used - “modify” not used - “noChange” if no change is done on existing service characteristic - “delete” not used		N	N	N
	Characteristic : array of JSON node of serviceCharacteristic – name and value of the user service characteristic name - string – name of the value part (ex: SLA for level of service support on user service) value – string – value of the service characteristic (ex: GOLD for SLA)		N	N	N

Note: The global response must be completed or failed. All requests for changes (array of user services) are managed as a transaction.

For an asynchronous result, the partner will post an event with the following data:

Ressource event of userService	supplied in the request by the partner	supplied in the synchronous response
id – string- the id generated by Orange for each event optional	Optional	Optional
Type - enum: updateNotification, deleteNotification mandatory	O = updateNotification	O/I
Time – dateTime mandatory	O	O/I
resource : userServiceUpdate resource mandatory	O : same data as in previous synchronous use case (last column of previous array ⁽¹⁾)	N

⁽¹⁾If the partner sends an event without initial order (push mode) externalReference is not supplied.

Example of update of the product offering of one user service : request

request: POST <https://<address of partner proxy>/mba/userservice/v2/userService/update>

```

{
  "externalReference": {
    "type": "orange",
    "id": "updateUserServicel"
  },
  "userService": [
    {
      "id": "1250",
      "relatedProductRefId": " a4fg87t54d8f5ss8ffr5562q",
      "relatedProductOfferingOperation": {
        "action": "swap",
        "externalReference": {
          "type": "orange",
          "id": "APP01OPE01"
        },
        "name": "Open Bee Essential QPM V2"
      },
      "updateState": "initialized"
    }
  ]
}

```

Example of update of the product offering of one user service with synchronous result: response

http return code 201

```

{
  "id": "partner_id_for_updateUserServicel",
  "externalReference": {
    "type": "orange",
    "id": "updateUserServicel"
  },
  "state": "completed",
  "userService": [

```

```
{
  "id": "1250",
  "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
  "relatedProductOfferingOperation": {
    "action": "swap",
    "externalReference": {
      "type": "orange",
      "id": "APP01OPE01"
    },
    "name": "Open Bee Essential QPM V2"
  },
  "note": {
    "text": "changing offer",
    "date": "2015-10-07T10:48:21+0200",
    "author": "Admin"
  },
  "updateDate": "2015-10-07T10:48:21+0200",
  "updateState": "completed"
}
]
```

Example of update of the product offering of one user service : response then EVENT request&response

- A) http response return code 201

```
{
  "id": "partner_id_for_updateUserService1",
  "externalReference": {
    "type": "orange",
    "id": "updateUserService1"
  },
  "state": "acknowledged",
  "userService": [
    {
      "id": "1250",
      "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
      "relatedProductOfferingOperation": {
        "action": "swap",
        "externalReference": {
          "type": "orange",
          "id": "APP01OPE01"
        },
        "name": "Open Bee Essential QPM V2"
      },
      "updateState": "acknowledged"
    }
  ]
}
```

- B) EVENT Request with the result

POST <https://ope.apibackbone.orange.com/mba2/userservice/v2/event>

```
{
  "id": "event_for_updateUserService_event05",
  "type": "updateNotification",
  "time": "2015-10-08T10:48:21-05:00",
  "resource": {
    "id": "partner_id_for_updateUserService1",
    "externalReference": {
      "type": "orange",
      "id": "updateUserService1"
    },
    "state": "completed",
    "userService": [
      {
        "id": "1250",
        "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
        "relatedProductOfferingOperation": {
          "action": "swap",
          "externalReference": {
            "type": "orange",
            "id": "APP01OPE01"
          },
          "name": "Open Bee Essential QPM V2"
        },
        "note": {
          "text": "changing offer",
          "date": "2015-10-07T10:48:21+0200",
          "author": "Admin"
        },
        "updateDate": "2015-10-07T10:48:21+0200",
        "updateState": "completed"
      }
    ]
  }
}
```

```

    ]
  }
}

```

- C) response of the event Request

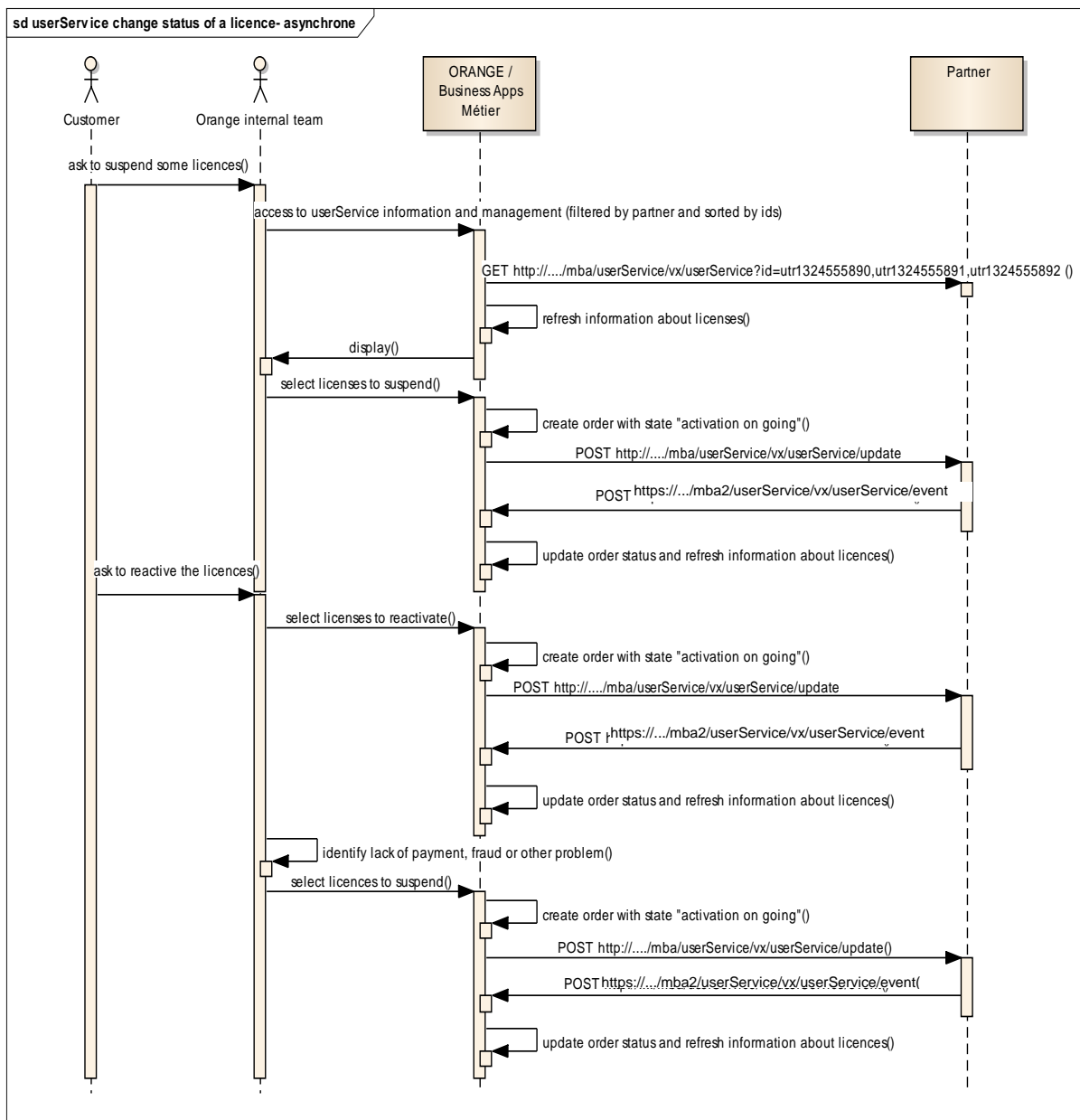
http return code 201

```

{
  "id": "event_for_updateUserService_event05",
  "time": "2015-10-07T10:48:21+0200",
  "type": "updateNotification"
}

```

4.2.4 Change the state of a user service: user service API



Sequence diagram for changing the state of some user services with asynchronous result
(Note: a synchronous result is possible but not illustrated here)

(*) Meaning of Tags in the column « supplied in the request by Orange”

- **Tag O/I.** It means that the value has been obtained by a previous « GET » and was not modified by Orange.
- **Tag O/M.** It means that the current value is modified.

Ressource userServiceUpdate		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner to trace the user service update		N	O/A mandatory	O/A mandatory
externalReference - JSON node - the reference of the user service update used by Orange mandatory	type – string - type of externalReference (orange) mandatory	O mandatory	O/I mandatory	O/I mandatory
	id - string- id of the externalReference mandatory	O mandatory	O/I mandatory	O/I mandatory
state – string- état de la réponse acknowledged : return receipt service user change requests completed : all service user change requests are performed failed : No request to change user service is performed		N	O = acknowledged mandatory	O = completed or failed mandatory
userService – array – tableau de userService mandatory		Voir le tableau ci-dessous		
Ressource userService		supplied in the request by Orange { }	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner when the end user service is created mandatory		O/I mandatory	O/I mandatory	O/I mandatory
externalState - string- status of the userService on orange side (active, suspended, inactive, deleted), it is expected that the partner sends back the orange state to avoid trouble of customer billing.		O/A (active or suspended) mandatory	O/I mandatory	O/I mandatory
state - string- technical status of the userService on partner side (active, inactive), Inactive state on partner side correspond to suspended, inactive or deleted on Orange side.		N	N	O/A mandatory
note – JSON node of Note- to add comment on a userService to ease the understanding of the userService state Optional	text - string - text of the comment mandatory if note node is provided	N	N	O/A (optional)
	date – dateTime - date and time of the comment mandatory if note node is provided	N	N	O/A (optional)
	author – string - author of the comment mandatory if note node is provided	N	N	O/A (optional)
updateDate - string- date of the update of the userService on partner side, if several updates occurred (on end user, on rights , on realizing resource, the partner provides the more recent date)		N	N	O/A mandatory
updateState – string - state of update of user service (used only when the updating of user services) : initialized, acknowledged, completed or failed mandatory		O = initialized mandatory	O/M = acknowledged mandatory	O/M = completed ou failed mandatory
validFor - JSON node of ValidFor to specify the starting date and the ending date of the userService availability not provided	startDateTime – string – beginning of validity for the userService not provided	N	N	N
	endDateTime – string – end of validity for the userService not provided	N	N	N

Ressource userService		supplied in the request by Orange (*)	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>		
relatedProductRefId – string- the id provided in the answer of Post productOrder (it is the identifier of the application of the customer) . Unique identifier of the userService Fleet mandatory		O/I Retrieved at the GET mandatory	O/I mandatory	O/I mandatory		
relatedProductOfferingOperation – JSON node of ProductOfferingOperation - the operation and the reference of offer not provided	action – string – action done on productOffering - «swap» when a productOffering is changed on a userService - «noChange» if the information about productOffering was not changed, not provided	N	N	N		
	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue not provided <table border="1" data-bbox="263 627 762 712"> <tr> <td>type – string - type of externalReference (orange)</td> </tr> <tr> <td>id- string- id of the externalReference</td> </tr> </table>	type – string - type of externalReference (orange)	id - string- id of the externalReference	N	N	N
	type – string - type of externalReference (orange)					
id - string- id of the externalReference						
name – string – short description of the offer in the Orange catalogue not provided	N	N	N			
relatedEndUserConfigurationOperation –JSON node of EndUserConfigurationOperation– the information related to end user linked to user Service (action identifies the operation made on end user) not provided	endUserOperation – JSON node of EndUserOperation - operation to realize on end user not provided	action – string – action done on end user - “add” when a userService was linked to endUser, - “modify” when an existing end user linked a userService was updated (change of name, email for ex) , - “swap” <i>not used</i> - “noChange” if the information about end user were not changed, - “delete” when an end user was suppressed on an existing userService (no more end user is specified) not provided	N	N	N	
	endUser – JSON node of Individual - not provided	id – string – id of end user inside partner IS	N	N	N	
		givenName – string – first name of the end user				
		familyName – string – family name of the end user				
		email - string – email of the end user				
		mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the end user				cc – string - international country prefix, ex 33 for France
		sn – string - local phone number including local prefix,				
fixedTelephoneNumber - JSON node of TelephoneNumber – fixed telephone number of the end user	cc – string - international country prefix, ex 33 for France					
	sn – string - local phone number including local prefix, ex					
postalAddress – JSON node of PostalAddressTelephoneNumber – address of the end user	streetNumber – JSON node of StreetNumber : <table border="1" data-bbox="810 1921 938 2004"> <tr> <td>number</td> </tr> <tr> <td>letter</td> </tr> </table> postcode – string –	number	letter			
number						
letter						

Ressource userService				supplied in the request by Orange (*)	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
			<p>postal code</p> <p>stateOrProvince – string- name of the state of province</p> <p>street1 – string – first line of address</p> <p>street2 – string- second line of address</p> <p>country – string - country code</p> <p>city – string – city name</p> <p>externalReference – JSON node of ExternalReference – id of end user in orange system</p> <p>type – string - type of externalReference (orange)</p> <p>id- string- id of the externalReference</p>			
	realizingResourceOperation – JSON node of RealizingResourceOperation – operation to realize on the technical support to deliver the service.	action – string – action done on ResourceOperation		N	N	N
	not provided	<p>realizingResource: JSON node of RealizingResource – the technical support information</p> <p>name – string- name of realizing resource (ex: mobileNumber or URL)</p> <p>value – array of JSON node RealizingResourceCharacteristic – value of realizing resource</p> <p>name- string – name of the value part (ex: sn for mobile number or URL prefix or SSL or authorized)</p> <p>value – string – value of the value part (ex: '0675846745' for sn , 'O or N' for SSL and authorized)</p>		N	N	N
relatedRightOperation – JSON node of RightOperation–login or	action – string – action done on right access for the userService			N	N	N
	<p>- “add” not used</p> <p>- “modify” not used</p> <p>- “noChange” if the information about login or password was not changed,</p>					

Ressource userService		supplied in the request by Orange (*)	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
password of user Service was changed (even if password is not provided in the interface, if the password was changed a «modify» action should be set not provided	- "resetLogin" when the required operation is to resetlogin - "resetPwd" if the required operation is to resetPwd not provided			
	loginMap- JSON node of LoginKeyVal string – login value not provided	N	N	N
	key – string- field used for end user login - 'login' for login field - 'organizationCode' for a code generated for enterprise customer (same used for all end users and specific to a customer enterprise) value – string – value corresponding to the key (login value if key = login, customer enterprise login code if key = organizationCode)			
	email- string- email to use to send the change done on loginMap structure (could be directly end user email or could be the email of userService fleet manager depending on enterprise customer internal organization) not provided			
relatedServiceCharacteristicOperation – array of JSON node of ServiceCharacteristicOperation– the information related to service characteristics was changed not provided	action – string – action done on ServiceCharacteristic - "add" not used - "modify" not used - "noChange" if no change is done on existing service characteristic - "delete" not used not provided	N	N	N
	Characteristic: array of JSON node of serviceCharacteristic – name and value of the user service characteristic not provided	N	N	N

Note: The global response must be completed or failed. All requests for changes (array of user services) are managed as a transaction.

For asynchronous result, the partner will post an event with the following data:

Ressource event of userService	supplied in the request by the partner	supplied in the synchronous response
id – string- the id generated by Orange for each event optional	Optional	Optional
Type - enum: updateNotification, deleteNotification mandatory	O = updateNotification	O/I
Time – dateTime mandatory	O	O/I
resource : userServiceUpdate resource mandatory	O: same data as in previous synchronous use case (last column of previous array ⁽¹⁾) ⁽¹⁾	N

⁽¹⁾If the partner sends an event without initial order (push mode) externalReference is not supplied.

Example of a suspension of a user service: request

Request: POST <https://<address of partner proxy>/mba/userservice/v2/userService/update>

```
{
  "externalReference": {
    "type": "orange",
    "id": "orderOfSuspension654"
  },
  "userService": [
    {
      "id": "1250",
      "externalState": "suspended",
      "relatedProductRefId": " a4fg87t54d8f5ss8ffr5562q",
      "updateState": "initialized"
    }
  ]
}
```

Example of a suspension of a user service: synchronous response

Http return code 201

```
{
  "id": "partner_id_for_updateUserServicel",
  "externalReference": {
    "type": "orange",
    "id": "orderOfSuspension654"
  },
  "state": "completed",
  "userService": [
    {
      "id": "1250",
      "externalState": "suspended",
      "state": "inactive",
      "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
      "note": {
        "text": "Suspended",
        "date": "2015-10-07T10:48:21+0200",
        "author": "Admin"
      },
      "updateDate": "2015-10-07T10:48:21+0200",
      "updateState": "completed"
    }
  ]
}
```

Example of suspension of a user service – asynchronous result - response then event request and response

- A) response - http return code 201

```
{
  "id": "partner_id_for_updateUserServicel",
  "externalReference": {
    "type": "orange",
    "id": "orderOfSuspension654"
  },
  "state": "acknowledged",
  "userService": [
    {
      "id": "1250",
      "externalState": "suspended",
      "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
    }
  ]
}
```

```
    "updateState": "acknowledged"
  }
]
}
```

- *B) event request with the result*

POST <https://ope.apibackbone.orange.com/mba2/userservice/v2/event>

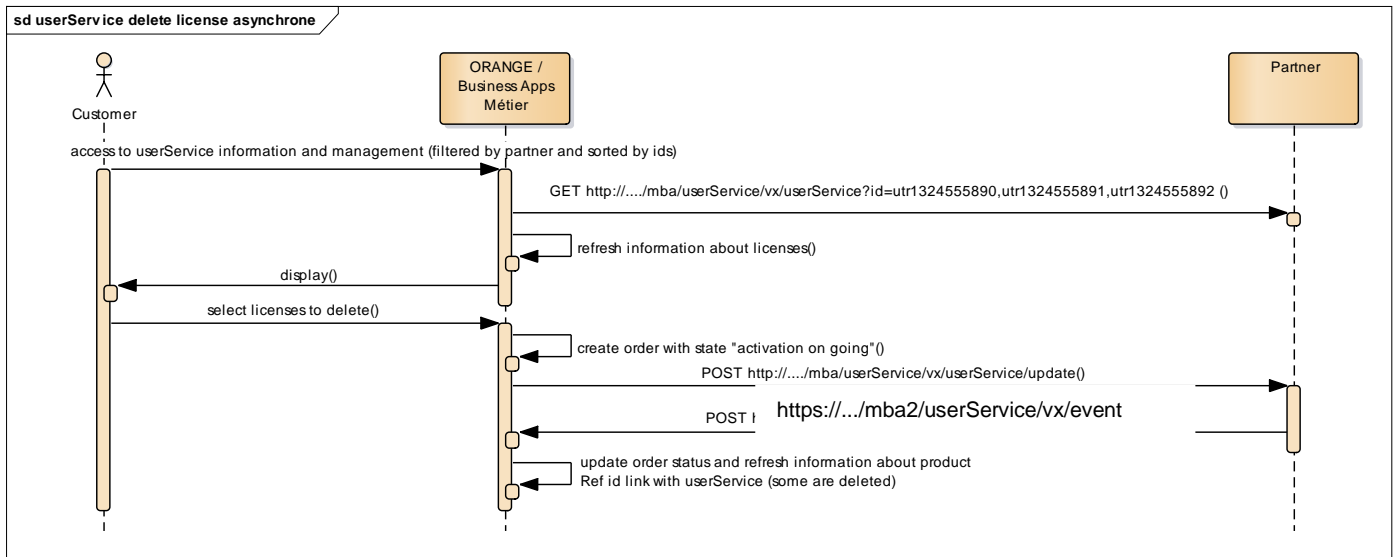
```
{
  "id": "partner_id_forTheEvent",
  "type": "updateNotification",
  "time": "2015-10-08T10:48:21+0200",
  "resource": {
    "id": "partner_id_for_updateUserService1",
    "externalReference": {
      "type": "orange",
      "id": "orderOfSuspension654"
    },
    "state": "completed",
    "userService": [
      {
        "id": "1250",
        "externalState": "suspended",
        "state": "inactive",
        "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
        "note": {
          "text": "Suspended",
          "date": "2015-10-07T10:48:21+0200",
          "author": "Admin"
        },
        "updateDate": "2015-10-07T10:48:21+0200",
        "updateState": "completed"
      }
    ]
  }
}
```

- *C) event response*

http code 201

```
{
  "id": "partner_id_forTheEvent",
  "type": "updateNotification",
  "time": "2015-10-08T10:48:21+0200"
}
```

4.2.5 Delete one or many services: user service API



Sequence diagram for terminating one or many user services in an asynchronous way

Note: a synchronous response is also possible but not illustrated here

The deletion of a licence is handled as a particular case of a state update.

(*) Meaning of Tags in the column « supplied in the request by Orange »

- Tag O/I means that the value has been obtained by a previous « GET » and was not modified by Orange.
- Tag O/M. It means that the current value is modified.

Ressource userServiceUpdate		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner to trace the user service update		N	O/A mandatory	O/A mandatory
externalReference - JSON node - the reference of the user service update used by Orange mandatory	type – string - type of externalReference (orange) mandatory	O mandatory	O/I mandatory	O/I mandatory
	id- string- id of the externalReference mandatory	O mandatory	O/I mandatory	O/I mandatory
state – string- état de la réponse acknowledged : return receipt service user change requests completed : all service user change requests are performed failed : No request to change user service is performed		N	O = acknowledged mandatory	O = completed or failed mandatory
userService – array – tableau de userService mandatory		Voir le tableau ci-dessous		
Ressource userService		supplied in the request by Orange (*)	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner when the end user service is created mandatory		O/I mandatory	O/I mandatory	O/I mandatory
externalState - string- status of the userService on orange side (active, suspended, inactive, deleted), it is expected that the partner sends back the orange state to avoid trouble of customer billing.		O/A (deleted) mandatory	O/I mandatory	O/I mandatory
state - string- technical status of the userService on partner side (active, inactive), Inactive state on partner side correspond to suspended, inactive or deleted on Orange		N	N	O/A mandatory

Ressource userService		supplied in the request by Orange (*)	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
side.					
note – JSON node of Note- to add comment on a userService to ease the understanding of the userService state Optional	text - string - text of the comment mandatory if note node is provided	N	N	O/A (optional)	
	date – dateTime - date and time of the comment mandatory if note node is provided	N	N	O/A (optional)	
	author – string - author of the comment mandatory if note node is provided	N	N	O/A (optional)	
updateDate - string- date of the update of the userService on partner side, if several updates occurred (on end user, on rights , on realizing resource, the partner provides the more recent date)		N	N	O/A mandatory	
updateState – string - state of update of user service (used only when the updating of user services) : initialized, acknowledged, completed or failed mandatory		O = initialized mandatory	O/M = acknowledged mandatory	O/M = completed ou failed mandatory	
validFor - JSON node of ValidFor to specify the starting date and the ending date of the userService availability not provided	startDateTime – string – beginning of validity for the userService not provided	N	N	N	
	endDateTime – string – end of validity for the userService not provided	N	N	N	
relatedProductRefId – string- the id provided in the answer of Post productOrder (it is the identifier of the application of the customer) . Unique identifier of the userService Fleet mandatory		O/I Retrieved at the GET mandatory	O/I mandatory	O/I mandatory	
relatedProductOfferingOperation – JSON node of ProductOfferingOperation - the operation and the reference of offer not provided	action – string – action done on productOffering - «swap» when a productOffering is changed on a userService - «noChange» if the information about productOffering was not changed, not provided	N	N	N	
	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue not provided	N	N	N	
	<table border="1"> <tr> <td>type – string - type of externalReference (orange)</td> </tr> <tr> <td>id- string- id of the externalReference</td> </tr> </table>	type – string - type of externalReference (orange)	id - string- id of the externalReference		
type – string - type of externalReference (orange)					
id - string- id of the externalReference					
name – string – short description of the offer in the Orange catalogue not provided	N	N	N		
relatedEndUserConfigurationOperation –JSON node of EndUserOperation- operation to realize on end user not provided	action – string – action done on end user - “add” when a userService was linked to endUser, - “modify” when an existing end user linked a userService was updated (change of name, email for ex) , - “swap” <i>not used</i> - “noChange” if the information about end user were not changed, - “delete” when an end user was suppressed on an existing userService (no more end user is specified) not provided	N	N	N	
	endUser – JSON node of Individual - not provided	N	N	N	
	id – string – id of end user inside partner IS				
	givenName – string – first name of the end user familyName – string – family name of the end user email - string – email of the end				

Ressource userService			supplied in the request by Orange (*)	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>		
		<p>user</p> <p>mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the end user</p> <p>fixedTelephoneNumber - JSON node of TelephoneNumber – fixed telephone number of the end user</p> <p>postalAddress – JSON node of PostalAddressTelephoneNumber – address of the end user</p> <p>externalReference - JSON node of ExternalReference – id of end user in orange system</p>	<p>cc – string - international country prefix, ex 33 for France</p> <p>sn – string - local phone number including local prefix,</p> <p>cc – string - international country prefix, ex 33 for France</p> <p>sn – string - local phone number including local prefix, ex</p> <p>streetNumber – JSON node of StreetNumber :</p> <table border="1"> <tr><td>number</td></tr> <tr><td>letter</td></tr> </table> <p>postcode – string – postal code</p> <p>stateOrProvince – string- name of the state of province</p> <p>street1 – string – first line of address</p> <p>street2 – string- second line of address</p> <p>country – string - country code</p> <p>city – string – city name</p> <p>type – string - type of externalReference (orange)</p> <p>id- string- id of the externalReference</p>	number	letter		
number							
letter							
	realizingResourceOperation – JSON node of	<p>action – string – action done on ResourceOperation</p> <p>- "add" not used</p> <p>- "modify" when value of technical support is changed</p>	N	N	N		

Ressource userService			supplied in the request by Orange (*)	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
	<p>RealizingResourceOperation – operation to realize on the technical support to deliver the service.</p> <p>not provided</p>	<p>- “swap” not used - “noChange” if no change is done on existing technical support - “delete” not used</p> <p>realizingResource: JSON node of RealizingResource – the technical support information</p> <p>name – string- name of realizing resource (ex: mobileNumber or URL)</p> <p>value – array of JSON node RealizingResourceCharacteristic – value of realizing resource</p> <p>name- string – name of the value part (ex: sn for mobile number or URL prefix or SSL or authorized)</p> <p>value – string – value of the value part (ex: '0675846745' for sn , 'O or N' for SSL and authorized)</p>	N	N	N
<p>relatedRightOperation – JSON node of RightOperation–login or password of user Service was changed (even if password is not provided in the interface, if the password was changed a «modify” action should be set</p> <p>not provided</p>	<p>action – string – action done on right access for the userService</p> <p>- “add” not used - “modify” not used - “noChange” if the information about login or password was not changed, - “resetLogin” when the required operation is to resetlogin - “resetPwd” if the required operation is to resetPwd</p> <p>not provided</p>		N	N	N
	<p>loginMap- JSON node of LoginKeyValue string – login value</p> <p>not provided</p> <p>key – string- field used for end user login - 'login' for login field - 'organizationCode' for a code generated for enterprise customer (same used for all end users and specific to a customer enterprise)</p> <p>value – string – value corresponding to the key (login value if key = login, customer enterprise login code if key = organizationCode)</p>		N	N	N
	<p>email- string- email to use to send the change done on loginMap structure (could be directly end user email or could be the email of userService fleet manager depending on enterprise customer internal organization)</p> <p>not provided</p>				
<p>relatedServiceCharacteristicOperation – array of JSON node of ServiceCharacteristicOperation– the information related to service characteristics was changed</p> <p>not provided</p>	<p>action – string – action done on ServiceCharacteristic</p> <p>- “add” not used - “modify” not used - “noChange” if no change is done on existing service characteristic - “delete” not used</p> <p>not provided</p>		N	N	N
	<p>Characteristic: array of JSON node of serviceCharacteristic – name and value of the user service characteristic</p> <p>not provided</p> <p>name- string – name of the value part (ex: SLA for level of service support on user service)</p> <p>value – string – value of the service characteristic (ex: GOLD for SLA)</p>		N	N	N

Note: The global response must be completed or failed. All requests for changes (array of user services) are managed as a transaction.

For asynchronous result, the partner will post an event with the following data:

Ressource event of userService	supplied in the request by the partner	supplied in the synchronous response
id – string- the id generated by Orange for each event optional	Optional	Optional
Type - enum: updateNotification, deleteNotification mandatory	O = deleteNotification	O/I
Time – dateTime mandatory	O	O/I
resource : userServiceUpdate resource mandatory	O : same data as in previous synchronous use case (last column of previous array ⁽¹⁾ <small>(1)</small>	N

⁽¹⁾If the partner sends an event without initial order (push mode) externalReference is not supplied.

Example of cancellation of a license: request

Request: **POST** <https://<address of partner proxy>/mba/userservice/v2/userService/update>

```

{
  "externalReference": {
    "type": "orange",
    "id": "orderForDeleteUserService341"
  },
  "userService": [
    {
      "id": "1250",
      "externalState": "deleted",
      "relatedProductRefId": " a4fg87t54d8f5ss8ffr5562q",
      "updateState": "initialized"
    }
  ]
}

```

Example of cancellation of a license - synchronous result

Response http return code 201

```

{
  "id": "partner_id_for_updateUserServicel",
  "externalReference": {
    "type": "orange",
    "id": "orderForDeleteUserService341"
  },
  "state": "completed",
  "userService": [
    {
      "id": "1250",
      "externalState": "deleted",
      "state": "inactive",
      "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
      "note": {

```

```

    "text": "deleted",
    "date": "2015-10-07T10:48:21+0200",
    "author": "Admin"
  },
  "updateDate": "2015-10-07T10:48:21+0200",
  "updateState": "completed"
}
]
}

```

Example of cancellation of a license in an asynchronous way - response then event request and response

- **A) Response http return code 201**

```

{
  "id": "partner_id_for_updateUserService1",
  "externalReference": {
    "type": "orange",
    "id": "orderForDeleteUserService341"
  },
  "state": "acknowledged",
  "userService": [
    {
      "id": "1250",
      "externalState": "deleted",
      "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
      "updateState": "acknowledged"
    }
  ]
}

```

- **B) event request containing the result:**

POST <https://ope.apibackbone.orange.com/mba2/userservice/v2/event>

```

{
  "id": "event_for_updateUserService_event05",
  "type": "deleteNotification",
  "time": "2015-10-08T10:48:21+0200",
  "resource": {
    "id": "partner_id_for_updateUserService1",
    "externalReference": {
      "type": "orange",
      "id": "orderForDeleteUserService341"
    },
    "state": "completed",
    "userService": [
      {
        "id": "1250",
        "externalState": "deleted",
        "state": "inactive",
        "relatedProductRefId": "a4fg87t54d8f5ss8ffr5562q",
        "note": {
          "text": "deleted",
          "date": "2015-10-07T10:48:21+0200",
          "author": "Admin"
        },
        "updateDate": "2015-10-07T10:48:21+0200",
        "updateState": "completed"
      }
    ]
  }
}

```

- C) event response :

Http return code 201

```
{  
  "id": "event_for_updateUserService_event05",  
  "time": "2015-10-07T10:48:21+0200",  
  "type": "deleteNotification"  
}
```

4.3 Event of userService coming from partnerRequest

To provide changes of relatedEndUser, relatedRight or relatedServiceCharacteristic, the partner will post an event with the following data:

Ressource event	supplied in the request by the partner	supplied in the synchronous response
id – string- the id generated by Orange for each event optional	Optional	Optional
Type - enum: updateNotification, deleteNotification mandatory	O	O/I
Time – dateTime mandatory	O	O/I
resource : userServiceUpdate resource mandatory	O: see the array below	N

UserServiceUpdateResource to provide:

UserServiceUpdateResource		supplied in the request by the partner
id – string- the id generated by partner to trace the user service update		O/A mandatory
externalReference - JSON node - the reference of the user service update used by Orange not provided	type – string - type of externalReference (orange) not provided	N
	id - string- id of the externalReference not provided	N
state – string- état de la réponse mandatory acknowledged : return receipt service user change requests completed : all service user change requests are performed failed : No request to change user service is performed		O = completed
userService – array – tableau de userService mandatory		Voir le tableau ci-dessous

Ressource userService		supplied in the request by the partner
id – string- the id generated by partner when the end user service is created mandatory		O mandatory
externalState - string- status of the userService on orange side (active, suspended, inactive, deleted),		N
state - string- technical status of the userService on partner side (active, inactive), Inactive state on partner side correspond to suspended, inactive or deleted on Orange side.		N
note – JSON node of Note- to add comment on a userService to ease the understanding of the userService state Optional	text - string - text of the comment mandatory if note node is provided	O (optional)
	date – dateTime - date and time of the comment mandatory if note node is provided	O (optional)
	author – string - author of the comment mandatory if note node is provided	O (optional)
updateDate - string- date of the update of the userService on partner side, if several updates occurred (on end user, on rights , on realizing resource, the partner provides the more recent date)		O mandatory
updateState – string - state of update of user service (used only when the updating of user services) : initialized, acknowledged, completed or failed mandatory		O = completed mandatory
validFor - JSON node of ValidFor to	startDateTime – string – beginning of validity for the userService optional	O (optional)

Ressource userService		supplied in the request by the partner		
specify the starting date and the ending date of the userService availability optional	endDateTime – string – end of validity for the userService optional	O (optional)		
	relatedProductRefId – string- the id provided in the answer of Post productOrder (it is the identifier of the application of the customer) . Unique identifier of the userService Fleet mandatory	O mandatory		
relatedProductOfferingOperation – JSON node of ProductOfferingOperation - the operation and the reference of offer not provided	action – string – action done on productOffering - «swap» when a productOffering is changed on a userService - «noChange» if the information about productOffering was not changed, not provided	N		
	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue not provided <table border="1" data-bbox="263 667 762 745"> <tr> <td>type – string - type of externalReference (orange)</td> </tr> <tr> <td>id- string- id of the externalReference</td> </tr> </table>	type – string - type of externalReference (orange)	id - string- id of the externalReference	N
	type – string - type of externalReference (orange)			
id - string- id of the externalReference				
name – string – short description of the offer in the Orange catalogue not provided	N			
relatedEndUserConfigurationOperation –JSON node of EndUserConfigurationOperation– the information related to end user linked to user Service (action identifies the operation made on end user) optional (provided if change concerns end user data) optional (provided if change concerns end user data or realizing resource data)	endUserOperation – JSON node of EndUserOperation - operation to realize on end user optional (provided if change concerns end user data)	action – string – action done on end user - “add” when a userService was linked to endUser, - “modify” when an existing end user linked a userService was updated (change of name, email for ex) , - “swap” <i>not used</i> - “noChange” if the information about end user were not changed, - “delete” when an end user was suppressed on an existing userService (no more end user is specified) (mandatory if endUserOperation node is provided)	O	
	endUser – JSON node of Individual -.. mandatory if endUserOperation node is provided)	id – string – id of end user inside partner IS (mandatory if endUser node is provided)	O	
		givenName – string – first name of the end user (optional)		
		familyName – string – family name of the end user mandatory if endUser node is provided		
		email - string – email of the end user (optional)		
		mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the end user Optional		cc – string - international country prefix, ex 33 for France (mandatory if mobileNumber node is provided)
		fixedTelephoneNumber - JSON node of TelephoneNumber – fixed telephone number of the end user Optional		sn – string - local phone number including local prefix, (mandatory if mobileNumber node is provided)
	postalAddress – JSON node of PostalAddressTelephoneNumber – address of the end user postalAddress – JSON node of PostalAddressCo	cc – string - international country prefix, ex 33 for France (mandatory if fixedTelephoneNumber node is provided) sn – string - local phone number including local prefix, (mandatory if fixedTelephoneNumber node is provided)		
	<table border="1" data-bbox="810 1832 1026 2051"> <tr> <td>streetNumber – JSON node of StreetNumber : Optional number mandatory if streetNumber node is provided</td> </tr> <tr> <td>letter Optional</td> </tr> </table>	streetNumber – JSON node of StreetNumber : Optional number mandatory if streetNumber node is provided	letter Optional	
streetNumber – JSON node of StreetNumber : Optional number mandatory if streetNumber node is provided				
letter Optional				

Ressource userService				supplied in the request by the partner
		<p>ntactMedium – address of the end user</p> <p>Optional</p> <p>postcode – string – postal code mandatory if postalAddress node is provided</p> <p>stateOrProvince – string- name of the state of province optional</p> <p>street1 – string – first line of address mandatory if postalAddress node is provided</p> <p>street2 – string- second line of address optional</p> <p>country – string - country code mandatory if postalAddress node is provided</p> <p>city – string – city name mandatory if postalAddress node is provided</p>		
		<p>externalReference – JSON node of ExternalReference – id of end user in orange system</p> <p>Optional</p>	<p>type – string - type of externalReference (orange) mandatory if externalReference node is provided</p>	O
			<p>id- string- id of the externalReference mandatory if externalReference node is provided</p>	O
	<p>realizingResourceOperation – JSON node of RealizingResourceOperation – operation to realize on the technical support to deliver the service.</p> <p>optional</p> <p>(provided if change concerns realizing resource data)</p>	<p>action – string – action done on ResourceOperation</p> <ul style="list-style-type: none"> - “add” not used - “modify” when value of technical support is changed - “swap” not used - “noChange” if no change is done on existing technical support - “delete” not used <p>mandatory if realizingResourceOperation node is provided</p>		O
		<p>realizingResource: JSON node of RealizingResource – the technical support information</p> <p>mandatory if realizingResourceOperation node is provided</p>	<p>name – string- name of realizing resource (ex: mobileNumber or URL) mandatory if realizingResourceOperation node is provided</p> <p>value – array of JSON node RealizingResourceCharacteristic – value of realizing resource mandatory if realizingResourceOperation node is provided</p> <p>name- string – name of the value part (ex: sn for mobile number or URL prefix or SSL or authorized) mandatory if realizingResourceOperation node is provided</p> <p>value – string – value of the value part (ex: ‘0675846745’ for sn , ‘O or N’ for SSL and authorized) mandatory if realizingResourceOperation node is provided</p>	O
<p>relatedRightOperation – JSON node of RightOperation–login or password of user Service</p>	<p>action – string – action done on right access for the userService</p> <ul style="list-style-type: none"> - “add” not used - “modify” not used - “noChange” if the information about login or password was not changed, - “resetLogin” when the required operation is to resetlogin - “resetPwd” if the required operation is to resetPwd <p>mandatory if relatedRightOperation node is provided</p>			O

Ressource userService			supplied in the request by the partner
was changed (even if password is not provided in the interface, if the password was changed a «modify» action should be set optional (provided if change concerns relatedRight data)	loginMap- JSON node of LoginKeyVal ue string – login value mandatory if relatedRight Operation node is provided	key – string- field used for end user login - 'login' for login field - 'organizationCode' for a code generated for enterprise customer (same used for all end users and specific to a customer enterprise) mandatory if relatedRightOperation node is provided value – string – value corresponding to the key (login value if key = login, customer enterprise login code if key = organizationCode) mandatory if relatedRightOperation node is provided	O
	email- string- email to use to send the change done on loginMap structure (could be directly end user email or could be the email of userService fleet manager depending on enterprise customer internal organization) mandatory if relatedRightOperation node is provided		
relatedServiceCharacteristicOperation – array of JSON node of ServiceCharacteristicOperation– the information related to service characteristics was changed optional (provided if change concerns relatedServiceCharacteristic data)	action – string – action done on ServiceCharacteristic - "add" not used - "modify" not used - "noChange" if no change is done on existing service characteristic - "delete" not used mandatory if relatedServiceCharacteristicOperation node is provided		O
	Characteristic: array of JSON node of serviceCharacteristic – name and value of the user service characteristic mandatory if relatedServiceCharacteristicOperation node is provided	name- string – name of the value part (ex: SLA for level of service support on user service) mandatory if relatedServiceCharacteristicOperation node is provided value – string – value of the service characteristic (ex: GOLD for SLA) mandatory if relatedServiceCharacteristicOperation node is provided	O

(1)If the partner sends an event without initial order (push mode) externalReference is not supplied.

4.4 Deletion of a customer and all its licenses: Product Ordering API

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
id – string- the id generated by partner to trace the order optional		N	O/A	O/A
externalReference - JSON node - the reference of the order used by Orange mandatory	type – string - type of externalReference (orange)	O	O/I	O/I
	id- string- id of the externalReference	O	O/I	O/I
category- string- to indicate if the order is for test objective or definitive deployment mandatory		O = product ion	O/I	O/I
state- string- status of the order mandatory		O =	O/M =	O/M =

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
		initialized	acknowledged	completed or failed	
note – JSON node- to add comment on an order to ease the understanding of the order state	text - string - text of the comment	N	O/M (optional)	O/M (optional)	
	date – dateTime - date and time of the comment	N	O/M (optional)	O/M (optional)	
	author – string - author of the comment	N	O/M (optional)	O/M (optional)	
orderDate - string- date of the creation of the order on Orange side mandatory		O	O/I	O/I	
completionDate - string- date to precise by partner to indicate when the order was processed optional		N	N	O/A mandatory	
requestedStartDate – string- date agreed with customer to start activation of the application or mandatory		O	O/I	O/I	
orderItem - array of JSON node- content of the order mandatory	id - string- identifier of the order line (set by Orange) mandatory	O	O/I	O/I	
	state – string – state of the order line mandatory	O = initialized	O/M = acknowledged	O/M = completed or failed	
	action – string – type of movement required in the order <ul style="list-style-type: none"> 'add' when the productRef id has to be created (first order) or when new services are required inside an existing productRef id , 'modify' when all user services of productRef id has to be migrated to a new type of application provided by ProductOffering, 'delete' when the customer stops the contrat for all userServices" mandatory 	O = delete	O/I	O/I	
	productRef - JSON node ProductRef – details on the service fleet concerned by the orderitem	id – string - Unique identifier of the userService Fleet then used to retrieve list of produced user Services	N	N	N
	userServiceQuantity – string- number of userServices to create. Filled only for new user services orders. This is the delta quantity to add (ex: if customer has already 90 userService and want to add 10 new user Services, then this string will contain 10)	N	N	N	
	characteristic – JSON node of ProductRefCharacteristic - parameters to apply to the fleet (ex: language, diskspace, SLA level). These characteristics are defined at the moment product offering is defined between partner and orange	name - string – name to identify the characteristic	N	N	N
	value – string- value of the characteristic				
productOffering – JSON node ProductOffering – offer	externalReference – JSON node ExternalReference - Unique identifier of the application in the Orange catalogue	N	N	N	
	type – string - type of externalReference (orange)				
	id - string- id of the externalReference				
	name – string – short description of the offer in the Orange catalogue	N	N	N	
relatedOrganization – JSON node Organization –	id – string – id of company mandatory	O/I Value received at	O/I	O/I	

Ressource ProductOrder			supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>	
company information mandatory			customer creation			
	externalReference – JSON node ExternalReference – see first line mandatory	type – string - type of externalReference (orange) mandatory	O	O/I	O/I	
		id - string- id of the externalReference mandatory	O	O/I	O/I	
	tradingName - string – name of the company not provided		N	N	N	
	registrationNumber – JSON node Identification – registration number not provided	type – string – type of registration number (SIREN, SIRET, ...)		N	N	N
		id – string – value of registration number		N	N	N
		issuingAuthority – string- the organization which delivered the registration number		N	N	N
	postalAddress - JSON node PostalAddressContactMedium – address of the company not provided	streetNumber – JSON node of StreetNumber	number – string – number in the street	N	N	N
			letter – string – letter to complete number	N	N	N
		postcode – string – postal code		N	N	N
		stateOrProvince – string- name of the state of province		N	N	N
		street1 – string – first line of street name		N	N	N
		street2 – string- second line of street name		N	N	N
		country – string - country code		N	N	N
		city – string – city name		N	N	N
	role – string – role of the company (customer, customerSubcontractor , other) not provided		N	N	N	
	characteristic – Array of JSON node PartyCharacteristic - to precise details (such as APE code) not provided	name - string – name to identify the characteristic		N	N	N
value – string- value of the characteristic						
relatedContact – array of JSON node Individual - list of contacts in company to proceed the order (max 5)	givenName – string – first name of the contact not provided		N	N	N	
	familyName – string – family name of the contact not provided		N	N	N	
	email - string – email of the contact not provided		N	N	N	
	mobileNumber – JSON node of TelephoneNumber – mobile telephone number of the contact not provided	cc – string - international country prefix, ex 33 for France		N	N	N
		sn – string - local phone number including local prefix,				
	fixedTelephoneNumber - JSON node of TelephoneNumber – fixed telephone number of the contact not provided	cc – string - international country prefix, ex 33 for France		N	N	N
		sn – string - local phone number including local prefix,				
	postalAddress – JSON node of PostalAddressTelephoneNumber	streetNumber – JSON node of StreetNumber	number – string – number in the street	N	N	N
letter – string – letter to complete number						

Ressource ProductOrder		supplied in the request by Orange	supplied in the synchronous response if <u>Asynchronous result</u>	supplied in the synchronous response if <u>synchronous result</u>
– address of the contact not provided	postcode – string – postal code			
	stateOrProvince – string- name of the state of province			
	street1 – string – first line of address			
	street2 – string- second line of address			
	country – string - country code			
	city – string – city name			
	role - string – role of the contact in the order management (customerFleetManager, customerProjectManager, or customerSignatory)	N	N	N
characteristic – Arrayt of JSON node of PartyCharacteristic - to precise function in company, not provided	name - string – name to identify the characteristic	N	N	N
	value – string- value of the characteristic			
externalReference - JSON node of ExternalReference - id of contact in orange system not provided	type – string - type of externalReference (orange)	N	N	N
	id - string- id of the externalReference			

For an asynchronous result the partner will post the following data:

Ressource event of ProductOrdering	supplied in the request by the partner	supplied in the synchronous response
id – string- the id generated by Orange for each event optional	Optional	Optional
Type - enum: completedStateNotification, failedStateNotification mandatory	O	O/I
Time – dateTime mandatory	O	O/I
productOrder resource mandatory	O: les valeurs ajoutées ou modifiées sont identiques à celles qu'il faut fournir dans le cas d'une réponse synchrone du tableau précédent (dernière colonne)	N

Example of cancellation of a customer: request

Request: POST <https://<address of partner proxy>/mba/productordering/v2/productOrder>

```
{
  "externalReference": {
    "type": "orange",
    "id": "6283"
  },
  "category": "production",
  "state": "initialized",
  "orderDate": "2018-11-14T16:10:17+0100",
  "requestedStartDate": "2018-11-14T16:10:17+0100",
  "orderItem": [
    {
      "id": "6283",
      "state": "initialized",
      "action": "delete"
    }
  ],
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "externalReference": {
      "type": "orange",
      "id": "customer14"
    }
  }
}
```

Example of cancellation of a customer with a synchronous result

```
{
  "id": "partner_order_id_for_order05",
  "externalReference": {
    "type": "orange",
    "id": "order05"
  },
  "category": "production",
  "state": "completed",
  "note": {
    "text": "DeleteCustomer",
    "date": "2015-08-23T11:42:23+0200",
    "author": "Admin"
  },
  "orderDate": "2015-08-23T11:41:23-24:00",
  "completionDate": "2015-06-23T09:42:53+0200",
  "requestedStartDate": "2015-09-19T16:42:23+0200",
  "orderItem": [
    {
      "id": "order01ItemDelete",
      "state": "completed",
      "action": "delete"
    }
  ],
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "externalReference": {
      "type": "orange",
      "id": "customer14"
    }
  }
}
```

Example of cancellation of a customer in an asynchronous way : response then event request and response

- A) http return code 201

```
{
  "id": "partner_order_id_for_order05",
  "externalReference": {
    "type": "orange",
    "id": "order05"
  },
  "category": "production",
  "state": "acknowledged",
  "note": {
    "text": "DeleteCustomer",
    "date": "2015-08-23T11:42:23+0200",
    "author": "Admin"
  },
  "orderDate": "2015-08-23T11:41:23+0200",
  "requestedStartDate": "2015-09-19T16:42:23+0200",
  "orderItem": [
    {
      "id": "order01ItemDelete",
      "state": "acknowledged",
      "action": "delete"
    }
  ],
  "relatedOrganization": {
    "id": "partnerCustomerId382",
    "externalReference": {
      "type": "orange",
      "id": "customer14"
    }
  }
}
```

- B) event request containing the result

POST <https://ope.apibackbone.orange.com/mba2/productordering/v2/event>

```
{
  "id": "eventOforder05-event01",
  "time": "2015-06-23T11:42:23+0200",
  "type": "completedStateNotification",
  "resource": {
    "id": "partner_order_id_for_order05",
    "externalReference": {
      "type": "orange",
      "id": "order05"
    },
    "category": "production",
    "state": "completed",
    "note": {
      "text": "DeleteCustomer",
      "date": "2015-08-23T11:42:23+0200",
      "author": "Admin"
    }
  },
  "orderDate": "2015-08-23T11:41:23+0200",
  "completionDate": "2015-06-23T09:42:53+0200",
  "requestedStartDate": "2015-09-19T16:42:23+0200",
  "orderItem": [
    {
      "id": "order01ItemDelete",
```

```
    "state": "completed",
    "action": "delete"
  }
],
"relatedOrganization": {
  "id": "partnerCustomerId382",
  "externalReference": {
    "type": "orange",
    "id": "customer14"
  }
}
}
```

- *B) event response*

Http return code 201

```
{
  "id": "eventOforder05-event01",
  "time": "2015-06-23T11:42:23+0200",
  "type": "completedStateNotification"
}
```

5 APPENDIX

5.1 Error messages management

The message error format is:

```
{
  "code": integer,           mandatory
  "message": "string",      mandatory
  "description": "string",  mandatory
  "infoURL": "string"      optionnal
}
```

When the POST request is not correct, usual Http code are returned with the error message.

For example: HTTP 400 bad-request, HTTP 422 unprocessable_entity...

When the POST request is correct but cannot be completed, the HTTP code 201 is returned with the status in response failed and the note is filled to explain the problem.

The functional errors managed in response event (asynchronous mode only) are:

- userService event

Code	Message	Description
001	Please check the Order State	Please check the Order State
003	One or more licenses do not exist or do not correspond to their RelatedProductRefId	One or more licenses do not exist or do not correspond to their RelatedProductRefId
004	Please check the Orange order ID, Order ID missed or not found	Please check the Orange order ID, Order ID missed or not found
005	No login found for this license	No login found for this license

- productOrdering event

Code	Message	Description
001	Attribute id is missing	Attribute id is missing
002	Bad Request. Error Message : Client Error : Invalid Request for resource	Bad Request. Error Message : Client Error : Invalid Request for resource