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Product Offering Qualification Management API Conformance Profile

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INTRODUCTION - API DESCRIPTION

The Product Offering Qualification API provides a standardized mechanism for placing a qualification request to check offer commercial eligibility with all of the necessary parameters. The API consists of a simple set of operations that interact with Catalog and Inventory systems in a consistent manner. A Product Offering Qualification is created based on a product offers that are defined in a catalog. Product Offering Qualification API is one of Pre-Ordering Management API Family. Product Offering Qualification API goal is to provide Product Offering commercial eligibility.

RESOURCE MODEL CONFORMANCE

API MANDATORY AND OPTIONAL RESOURCES

For the resources defined by the API fill the following table and indicate which ones are mandatory and which ones are optional.

Resource Name	Mandatory or Optional	Comments
productOfferingQualification	M	

Product Offering Qualification MANDATORY AND OPTIONAL ATTRIBUTES

The table below summarizes mandatory and optional attributes for resource "Product Offering Qualification"

Attribute Name	Mandatory or Optional	Comments
id	M (in response messages) O (otherwise)	Initially generated by the server and provided in the response upon resource creation. Not available in POST request
href	M (in response messages) O (otherwise)	Initially generated by the server and provided in the response upon resource creation Value in response must be the same as the one set in Location header provided upon entity creation Not available in POST request
description	O	
effectiveQualificationDate	O/M	Must be provided once productOfferingQualification has been completed
expectedPOQCompletionDate	O	
expirationDate	O	
instantSyncQualification	O	By default value to false.
productOfferingQualificationDate	M (in response messages)	Not available in POST request
provideAlternative	O	By default false

provideOnlyAvailable	O	by default true
provideUnavailabilityReason	O	by default false
qualificationResult	O/M	
requestedPOQCompletionDate	O	Must be provided once productOfferingQualification has been completed
state	M (in response messages) O (otherwise)	Only required in response messages from the server when providing the Product Offering Qualification entity contents (responses to create-POST and read-GET the entity)
@baseType	O	
@type	O	
@schemaLocation	O	
channel	O	A channel where the POQ must be performed
id	M	
href	O	
name	O	
@baseType	O	
@schemaLocation	O	
@type	O	
@referredType	O	
note	O	Array of note(s)
id	O	
date	O	
author	O	
text	M	
@baseType	O	
@schemaLocation	O	
@type	O	
relatedParty	O/M	Array of related party same rule applies for relatedParty structure nested in product RelatedParty are mandatory to at least indicate requester except specific UC
id	M	
href	O	
role	M/O	The role is mandatory if the id is referring a party resource.

			The role is optional is the id is referring a partyRole resource.
	name	O	
	@referredType	M	It allows to get id type : partyRole or Party or Party specialization: individual or organization
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	productOfferingQualificationItem	M	Array of POQ item – At least one item is mandatory
	id	M	
	expectedActivationDate	O	
	qualificationItemResult	O/M	Must be provided once productOfferingQualification has been completed
	action	O – by default valued to add	
	state	M (in response messages) O (otherwise)	Only required in response messages from the server when providing the Product Offering Qualification entity contents (responses to create-POST and read-GET the entity)
	@schemaLocation	O	
	@type	O	
	@baseType	O	
	alternateProductOfferingProposal	O	Array of alternate product offering proposal. Must be provided only by server side if alternate requested (and available)
	id	M	
	alternateActivationDate	O	Must be provided once productOfferingQualification item has been completed
	@schemaLocation	O	
	@type	O	
	@baseType	O	
	alternateProductOffering	O/M an alternate productOffering or an alternate productSpecification	0 or 1

		must be present if alternate product offering proposal is valued	
	id	M	
	href	O	
	name	O	
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	@referredType	O	
	alternateProductSpecification	O/M an alternate productOffering or an alternate productSpecification must be present if alternate product offering proposal is valued	0 or 1
	id	M	
	href	O	
	version	O	
	name	O	
	targetProductSchema (nested in alternateProductSpecification)		0 or 1
	@baseType	O	
	@schemaLocation	O	
	@type	M	
	category	O/M A category or a productSpecification or a productOffering must be provided for each POQ item in the request	0 or 1
	id	M	
	href	O	
	name	O	
	version	O	
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	@referredType	O	

eligibilityUnavailabilityReason	O	An array of unavailability reason that could be provided once qualification performed
code	M	
label	O	
@baseType	O	
@schemaLocation	O	
@type	O	
product	O/M Must be provided if not productOffering provided	0 or 1
id	O/M depending if product is passed by ref or literally	Best practice: Mandatory for any action different from add
href	O	
isBundle	O By default: false	
name	O	
@type	O	
@schemaLocation	O	
@baseType	O	
productCharacteristic		<p>Array of product characteristic(s)</p> <p>Capability to provide characteristic valued is mandatory if</p> <ul style="list-style-type: none"> Characteristic defined in catalog for this productSpec and targetProductSchema no provided
name	M	
valueType	O string is considered by default	
value	M	This attribute type is any in the swagger
@baseType	O	
@schemaLocation	O	
@type	O	
productRelationship		Array of product relationship(s)
relationshipType	M	
product	M	A referred or valued product must be present
@baseType	O	

	@schemaLocation	O	
	@type	O	
	productSpecification	O/M A category or a productSpecification or a productOffering must be provided for each POQ item in the request	0 or 1
	id	M	
	href	O	
	version	O	
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	@referredType	O	
	name	O	
	targetProductSchema		0 or 1
	@baseType	O	
	@schemaLocation	O	
	@type	M	
	realizingResource	O	an array of resource realizing this product
	id	M	
	href	O	
	name	O	
	value	O	
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	@referredType	O	
	realizingService	O	an array of service realizing this product
	id	M	
	href	O	
	name	O	
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	@referredType	O	
	relatedPlace	O/M	Array of place(s)
	id	O/M depending if place is passed by value or ref	
	href	O	

	name	O	
	role	M	
	@referredType	M	Because place could be a geographicAddress, geographicLocation or a geographicSite, a type must be provided.
	@schemaLocation	O	
	@baseType	O	
	@type	O	
	productOffering	O/M A category or a productSpecification or a productOffering must be provided for each POQ item in the request	0 or 1
	id	M	
	href	O	
	name	O	
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	@referredType	O	
	qualificationItemRelationship	O	Array of POQ Item relationship
	id	M	Must an id of this POQ
	relationshipType	M	
	@baseType	O	
	@schemaLocation	O	
	@type	O	
	terminationError	O	Array of termination error used when POQ item could be performed properly
	id	O/M	At least an id or a value must be provided
	value	O/M	At least an id or a value must be provided
	@baseType	O	
	@schemaLocation	O	
	@type	O	

NOTIFICATION MODEL CONFORMANCE

The Pub/Sub models are common and described in the TMF REST Design Guidelines. Use the following templates to describe the Hub Mandatory and Optional attributes and filtering support.

ProductOfferingQualification MANDATORY AND OPTIONAL NOTIFICATIONS

For the Notifications defined by the API the following table indicates which ones are mandatory and which ones are optional.

Here's an example of a request for registering a listener:

Notification Name	Mandatory or Optional	Comments
productOfferingQualificationCreateEvent	O	
productOfferingQualificationStateChangeEvent	O	
productOfferingQualificationDeleteEvent	O	
productOfferingQualificationInformationRequiredEvent	O	
productOfferingQualificationChangeEvent	O	

All attributes of the resource associated with the notification are mandatory.

API OPERATIONS CONFORMANCE

For every single resource use the following templates and define what operations are optional and what operations are mandatory.

Product Offering Qualification MANDATORY AND OPTIONAL OPERATIONS

The following table indicates which ones are mandatory and which ones are optional for Product Offering Qualification resource:

Uniform API Operation	Mandatory/Optional	Comments
GET	M/O	GET must be used to retrieve a representation of a resource This operation could be optional for implementation where qualification is provided on the fly in POST response.
POST	M	POST must be used to create a new resource
PATCH	O	PATCH must be used to partially update a resource
DELETE	O	DELETE must be used to remove a resource

API GET FILTERING OPERATION CONFORMANCE

For every single resource use the following template to specify the mandatory and optional features supported by the GET filtering operation.

Definitions

Filtered Search: : A filtered search can be applied using query parameters in order to obtain only the resource entities that meet the criteria defined by the filtering parameters included in the query request. Several elements can be applied to the filtered search. In that case logic, a logical AND is applied to combine the criteria (e.g.:?category=<value> &state=<value>)

Attribute selection (Filtered Response Data): In order to apply a filter and limit the number of attributes included in the response, the GET request can include the “?fields=” query parameter. Several elements can be applied to the filter. In that case, a logical AND is applied to combine the values (e.g.:?fields=category,state) will provide in the response only the values assigned to attributes category and state. Attribute selection capabilities are the same for collections retrieval and individual resource queries

All the GET operations in this API share the state status code pattern:

GET	M	
Response Status Code 200	M	With JSON appointment objects as body response.
Response Status Code 404	M	When resource can't be found
Other Status Codes	N/A	

/productOfferingQualificationManagement/v4/productOfferingQualification?fields=...&{filtering}

Filtered Search:

Providing filtering criteria is mandatory to avoid too many answers retrieved. See example below:

- qualificationResult
- description
- effectiveQualificationDate
- state
- interval on ant date (effectiveQualificationDate > 11/4/2018 & effectiveQualificationDate > 11/9/2017)
- ...

Filtered Data: A filtered response can be requested for the following attributes using the “?fields=” query parameter

- Any of the attributes in the first level of Product Offering Qualification resource definition

/productOfferingQualificationManagement/v4/productOfferingQualification/{ID}?fields=...

Filtered Search: A filtered response can be requested for the following attributes using the “?fields=” query parameter

- Any of the attributes in the first level of Product Offering Qualification resource definition

API POST OPERATION CONFORMANCE

/productOfferingQualificationManagement/v4/productOfferingQualification/

This Uniform Contract operation is used to create a Product Offering Qualification resource in the server.

The response to this operation must include a Location header set to /productOfferingQualificationManagement/productOfferingQualification/{ID} where {ID} indicates the identifier assigned by the server to the new productOfferingQualification resource created

POST	M	
Response Status Code 201	M	
Other Status Codes	NA	

The following table indicates attributes that are required to be sent when creating a new Product Offering Qualification as well as attributes with special considerations:

Attribute name	Mandatory	Default	Rule
id	NA/M		Must not be in POST request except if a new version of an existing productOfferingQualification is r
href	NA		Must not be in POST request
description	O		
effectiveQualificationDate	NA		Must not be in POST request
expectedPOQCompletionDate	NA		Must not be in POST request
expirationDate	NA		Must not be in POST request
instantSyncQualification	O	false	
productOfferingQualificationDate	NA		Must not be in POST request
provideAlternative	O	false	
provideOnlyAvailable	O	true	
provideUnavailabilityReason	O	false	
requestedPOQCompletionDate	O		
state	NA		Must not be in POST request
channel	O		If present an id must be provided.
note	O		If present a text must be provided. id is optional but very helpful for modification via JSON/PATCH
relatedParty	O		If present an id must be provided. If id is not a partyRole, the role is mandatory. @referredType is mandatory
productOfferingQualificationItem	M		At least one item required. id is mandatory. action is by default set to add.

Attribute name	Mandatory	Default	Rule
			At least one productOffering or one product or one category must be provided qualificationItemResult must not be in POST item
alternateProductOfferingProposal	NA		Must not be in POST request
category	O		If present an id must be provided.
eligibilityUnavailabilityReason	NA		Must not be in POST request
product	O		...Mandatory if productOffering or category not provided if passed by ref an id must be provided.
productCharacteristic	O		name and value are mandatory. by default, valueType as 'string' value.
productRelationship	O		relationshipType and a product target must be provided
productSpecification	O		if present an id must be provided. if targetProductSchema used @baseType or @type must be provided.
realizingResource	O		If present an id must be provided.
realizingService	O		If present an id must be provided.
relatedPlace	O		If provided, role is mandatory.
productOffering	O		...Mandatory if product or category not provided If present an id must be provided.
qualificationItemRelationship	O		If present an id & relationshipType must be provided.
terminationError	NA		Must not be in POST request

The response from the server must include a BODY with the contents of the new resource created, filled with at least the same information elements that were included in the request and are supported by the server. Notice that the value stored by the server may be different than the one set in the request (e.g.: productSpecification.name)

If the POST request includes optional parameters (as per the model resource definition) that are not supported by the server, then the server must reject the request (replying with a 4xx error response) indicating the parameter not supported.

The BODY of the response from the server must include attribute "href" set to the same value as the one in the Location header.

The server must include in the BODY of the response, even if they are not included in the request, the following attributes that are mandatory in the definition of a Product Offering Qualification as per the resource model defined

- id
- href
- state
- productOfferingQualificationDate
- productOfferingQualificationItem.state

We must note that some attributes must not be sending in the POST request and could be not valued in the POST answer:

- expectedPOQCompletionDate
- qualificationResult
- expirationDate,
- ...

The BODY of the response from the server could include attribute “href” (or “reference”) under each one of the entities within the Product Offering Qualification model that can be addressed individually and were included in the response. This applies to any of the following entities

- relatedParty
- productSpecification
- place
- product
- supportingService
- supportingResource
- etc...

API PATCH OPERATION CONFORMANCE

This section defines which attributes are patchable.

Since PATCH operation is optional and not included in the basic CONNECT certification this is not applicable in this conformance document.

API DELETE OPERATION CONFORMANCE

This section defines what operations can be used to delete a Product Offering Qualification resource.

Since DELETE operation is optional and not included in the basic CONNECT certification this is not applicable in this conformance document

API CONFORMANCE TEST SCENARIOS

This section describes the test scenarios required for the basic CONNECT certification of Product Offering Qualification API.

Test Cases must be executed in the order defined for each resource because the result from one of the scenarios will be input for the next one.

Requests must be addressed to the endpoint provided for certification, specifically they must be addressed to the URI defined by the concatenation of the {apiRoot} and the specific resource, where the {apiRoot} is defined as {serverRoot}/tmf-api/productOfferingQualificationManagement/v4, being {serverRoot} defines the certification endpoint

Product Offering Qualification resource TEST CASES

Nominal Scenarios

TC_Product Offering Qualification_N1 – Create new Product Offering Qualification with minimum required information

Send a POST message to {apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/ with the following contents in the BODY

```
{
  "description": "Illustration of a POQ resource",
  "instantSyncQualification": false,
  "provideAlternative": true,
  "provideOnlyAvailable": true,
  "provideUnavailabilityReason": false,
  "requestedPOQCompletionDate": "2019-05-03T09:37:23.429Z",
  "channel": {
    "id": "1",
    "name": "Online chanel",
    "@type": "Channel"
  },
  "note": [
    {
      "id": "1",
      "author": "Jean Pontus",
      "date": "2019-05-02T09:37:23.429Z",
      "text": "This is an illustration of the POQ resource",
      "@type": "Note"
    }
  ],
  "productOfferingQualificationItem": [
    {
```

```
"id": "1",
"expectedActivationDate": "2019-05-02T09:37:23.429Z",
"action": "add",
"note": [
  {
    "id": "2",
    "author": "Jean Pontus",
    "date": "2019-05-02T09:37:23.429Z",
    "text": "home address is provided",
    "@type": "Note"
  }
],
"product": {
  "relatedPlace": [
    {
      "id": "459-fgr-t78",
      "href":
"https://host:port/geographicAddressManagement/v4/geographicAddress/459-fgr-t78",
      "@type": "PlaceRef",
      "name": "Home address",
      "role": "install adress",
      "@referredType": "GeographicAddress"
    }
  ]
},
"productOffering": {
  "id": "142789",
  "href": "https://host:port/productCatalogManagement/v4/productOffering/142789",
  "name": "TMF Broadband Offer",
  "@type": "productOffering",
  "@referredType": "ProductOffering"
},
"@type": "ProductOfferingQualificationItem"
},
"relatedParty": [
  {
    "id": "45",
    "href": "https://host:port/partyManagement/v4/individual/45",
    "name": "Jean Pustomer",
    "role": "prospect",
    "@type": "RelatedParty",
    "@referredType": "Individual"
  }
],
"@type": "ProductOfferingQualification",
"@baseType": "ProductOfferingQualification"
}
```

Wait for a response from the server with the following characteristics

- Response Code 201-Created
 - Include a location header in the body set to `/apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/{IDPOQ1}` where `{IDPOQ1}` indicates the identifier assigned by the server to the new Product Offering Qualification resource
 - The response message includes all mandatory parameters (**including id, state, productOfferingQualificationItem.state and productOfferingQualificationDate that were not sent in the original request**)
 - The body of the response matches the values set in the original request
- Send a GET message to `/apiRoot}/productOfferingQualification/{IDPOQ1}`
 - Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one Product Offering Qualification resource with ID set to `{IDPOQ1}`, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier `{IDPOQ1}` matches the values set in the original request

TC_Product Offering Qualification_N2 – Create new Product Offering Qualification with minimum set of parameters supported by server

- Send a POST message to `{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/` with the following contents in the BODY

```
{
  "description": "POQ illustration with a relationship on existing product",
  "instantSyncQualification": false,
  "provideAlternative": true,
  "provideOnlyAvailable": true,
  "provideUnavailabilityReason": true,
  "requestedPOQCompletionDate": "2019-05-02T09:37:23.429Z",
  "productOfferingQualificationItem": [
    {
```

```
"id": "1",
"expectedActivationDate": "2019-05-22T09:37:23.429Z",
"action": "add",
"@type": "productOfferingQualificationItem",
"product": {
  "productRelationship": [
    {
      "relationshipType": "reliesOn",
      "@type": "ProductRelationship",
      "product": {
        "id": "6001",
        "href": "https://host:port/productInventoryManagement/v4/product/6001",
        "@type": "Product"
      }
    }
  ],
  "productSpecification": {
    "id": "eLineSpec",
    "name": "ELine product specification",
    "@type": "ProductSpecification",
    "targetProductSchema": {
      "@schemaLocation": "https://MEF....",
      "@type": "eLine",
      "BandwidthProfile": {
        "cir": {
          "amount" : "500",
          "unit" : "Mbp/s"
        }
      }
    }
  },
  "relatedParty": [
    {
      "name": "BuyerOrganizationCompanyName",
      "id": "45h-jkk",
      "role": "buyer",
      "@type": "relatedParty",
      "@referredType": "Organization"
    }
  ]
},
"productOffering": {
  "id": "56f-89d-fg45",
  "href": "https://host:port/productCatalogManagement/v4/productOffering/56f-89d-fg45",
  "name": "eLine Offering",
  "@type": "ProductOffering",
  "@referredType": "ProductOffering"
}
```



```
    }  
  ],  
  "@type": "ProductOfferingQualification",  
  "@baseType": "ProductOfferingQualification"  
}
```

- Wait for a response from the server with the following characteristics
 - Response Code 201-Created
 - Include a location header in the body set to
/{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/{IDPOQ2}
where {IDPOQ2} indicates the identifier assigned by the server to the new Product Offering Qualification resource
 - The response message includes all mandatory parameters (including productOfferingQualificationDate and state that were not sent in the original request)
 - The body of the response matches the values set in the original request
- Send a GET message to /{apiRoot}/
productOfferingQualificationManagement/v4/productOfferingQualification/{IDPOQ2}
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one Product Offering Qualification resource with ID set to {IDPOQ2}, the same identifier as assigned by the server to the new resource created
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDPOQ2} matches the values set in the original request

TC_Product Offering Qualification_N3 – Search for Product Offering Qualification with specific characteristics

- Send a GET message to
/{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification?channel.id=1
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK

- The body of the response includes at least two Product Offering Qualification resources referring to {IDPOQ1} and {IDPOQ2}
- The body of the response for the resource with each identifier matches the values in the corresponding original request
- Send a GET message to
`/[apiRoot]/productOfferingQualificationManagement/v4/productOfferingQualification?instantSyncQualification=false`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one Product Offering Qualification resource referring to {IDPOQ1} and there is no reference to Product Offering Qualification resource {IDPOQ2}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDPOQ1} matches the values in the original request
- Send a GET message to
`/[apiRoot]/productOfferingQualificationManagement/v4/productOfferingQualification?instantSyncQualification=true`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one Product Offering Qualification resource referring to {IDPOQ2} and there is no reference to Product Offering Qualification resource {IDPOQ1}
 - The response message includes all mandatory parameters
 - The body of the response for the resource with identifier {IDPOQ2} matches the values in the original request

TC_Product Offering Qualification_N4 – Filtered retrieval of Product Offering Qualification

- Send a GET message to
`{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/{IDPOQ2}?fields=id,href,instantSyncQualification,state,qualificationResult`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one Product Offering Qualification resource referring to {IDPOQ2} and including only attributes id,href,externalId, priority and state:

```
{
  "id": "IDPOQ2",
  "href":
  "https://host:port/productOfferingQualificationManagement/v4/productOfferingQualification/IDPOQ2",
  "instantSyncQualification": true,
  "state": "done",
  "qualificationResult": "green"
}
```

- Send a GET message to
`{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/{IDPOQ1}?fields=id,state,productOfferingQualificationItem.id,productOfferingQualificationItem.state,productOfferingQualificationItem.action`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one Product Offering Qualification resource referring to {IDPOQ1} and including only attributes id, state, and an array of order item with attributes: id, state, and action matching the values in the original request:

```
{
  "id": "IDPOQ1",
  "productOfferingQualificationItem": [
    {
      "id": "1",
      "action": "add",

```

```
    "state": "acknowledged",  
  },  
],  
"state": "acknowledged",  
}
```

Notice that this test case is using parameters "state", "id", "productOfferingQualificationItem.state" and "productOfferingQualificationItem.action" to filter the data included in the response but any other productOfferingQualification parameter could be used

TC_Product Offering Qualification_N5 – Filtered Search and Filtered data response

- Send a GET message to
`{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification?productOfferingQualificationItem.productOffering.id=142789&fields=id,state,description`
- Wait for a response from the server with the following characteristics
 - Response Code 200-OK
 - The body of the response includes one Product Offering Qualification resource referring to {IDPOQ1} and there is no reference to Product Offering Qualification resource {IDPOQ2}
 - The body of the response for the resource includes only attributes id, state and category matching the values in the corresponding original request:

```
{  
  "id": "IDPOQ1",  
  "description": "Illustration of a POQ resource",  
  "state": "acknowledged",  
}
```

Notice that this test case is using the parameters id, state, and description to filter the data included in the response but any other productOfferingQualification parameter could be used

Error Scenarios

TC_Product Offering Qualification_E1 – Unknown Trouble Product Offering Qualification identifier

- Send a GET message to
`{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/{IDPOQ3}`,
where {IDPOQ3} does not match any of the identifiers previously created in the server
- Wait for a response from the server with the following characteristics
 - Response Code 404-Not Found

TC_Product Offering Qualification_E2 – Invalid Request – unexpecting parameter

- Send a POST message to `{apiRoot}/productOfferingQualificationManagement/v4/Product Offering Qualification/` with the following contents in the BODY.

```
{
  "description": "Illustration of a POQ resource",
  "instantSyncQualification": false,
  "provideAlternative": true,
  "provideOnlyAvailable": true,
  "provideUnavailabilityReason": false,
  "requestedPOQCompletionDate": "2019-05-03T09:37:23.429Z",
  "state": "acknowledged",
  "channel": {
    "id": "1",
    "name": "Online chanel",
    "@type": "Channel"
  },
  "note": [
    {
      "id": "1",
      "author": "Jean Pontus",
      "date": "2019-05-02T09:37:23.429Z",
      "text": "This is an illustration of the POQ resource",
      "@type": "Note"
    }
  ],
  "productOfferingQualificationItem": [
    {
      "id": "1",
      "state": "acknowledged",
      "expectedActivationDate": "2019-05-02T09:37:23.429Z",
      "action": "add",
      "note": [
        {
```

```

        "id": "2",
        "author": "Jean Pontus",
        "date": "2019-05-02T09:37:23.429Z",
        "text": "home address is provided",
        "@type": "Note"
    }
],
"product": {
    "relatedPlace": [
        {
            "id": "459-fgr-t78",
            "href":
"https://host:port/geographicAddressManagement/v4/geographicAddress/459-fgr-t78",
            "@type": "PlaceRef",
            "name": "Home address",
            "role": "install address",
            "@referredType": "GeographicAddress"
        }
    ]
},
"productOffering": {
    "id": "142789",
    "href":
"https://host:port/productCatalogManagement/v4/productOffering/142789",
    "name": "TMF Broadband Offer",
    "@type": "productOffering",
    "@referredType": "ProductOffering"
},
"@type": "ProductOfferingQualificationItem"
}
],
"relatedParty": [
    {
        "id": "45",
        "href": "https://host:port/partyManagement/v4/individual/45",
        "name": "Jean Pustomer",
        "role": "prospect",
        "@type": "RelatedParty",
        "@referredType": "Individual"
    }
],
"@type": "ProductOfferingQualification",
"@baseType": "ProductOfferingQualification"
}

```

Notice that this request features unaccepting parameters as state, and productOfferingQualificationItem.state.

- Wait for an error response from the server indicating the unexpected parameters in the request

TC_Product Offering Qualification_E3 – Invalid Request – Missing parameter mandatory in context

- Send a POST message to
{apiRoot}/productOfferingQualificationManagement/v4/productOfferingQualification/ with the following contents in the BODY.

```
{
  "description": "Illustration of a POQ resource",
  "instantSyncQualification": false,
  "provideAlternative": true,
  "provideOnlyAvailable": true,
  "provideUnavailabilityReason": false,
  "requestedPOQCompletionDate": "2019-05-03T09:37:23.429Z",
  "channel": {
    "name": "Online chanel",
    "@type": "Channel"
  },
  "note": [
    {
      "id": "1",
      "author": "Jean Pontus",
      "date": "2019-05-02T09:37:23.429Z",
      "text": "This is an illustration of the POQ resource",
      "@type": "Note"
    }
  ],
  "productOfferingQualificationItem": [
    {
      "id": "1",
      "expectedActivationDate": "2019-05-02T09:37:23.429Z",
      "action": "add",
      "note": [
        {
          "id": "2",
          "author": "Jean Pontus",
          "date": "2019-05-02T09:37:23.429Z",
          "text": "home address is provided",
          "@type": "Note"
        }
      ],
      "product": {
        "relatedPlace": [
          {
            "id": "459-fgr-t78",
            "href":
"https://host:port/geographicAddressManagement/v4/geographicAddress/459-fgr-t78",
            "@type": "PlaceRef",
            "name": "Home address",
```

```
        "role": "install adress",
        "@referredType": "GeographicAddress"
      }
    ]
  },
  "productOffering": {
    "name": "TMF Broadband Offer",
    "@type": "productOffering",
    "@referredType": "ProductOffering"
  },
  "@type": "ProductOfferingQualificationItem"
}
],
"relatedParty": [
  {
    "id": "45",
    "href": "https://host:port/partyManagement/v4/individual/45",
    "name": "Jean Pustomer",
    "role": "prospect",
    "@type": "RelatedParty",
    "@referredType": "Individual"
  }
],
"@type": "ProductOfferingQualification",
"@baseType": "ProductOfferingQualification"
}
```

Notice that this request is missing a channel id and product offering id in the order item described.

- Wait for an error response from the server indicating the mandatory parameters missing in the request

Document History

Version History

Version Number	Date	Release led by:	Description
1.0.0 Release 18.0	12/6/2017	Ludovic Robert	First Release of the Document.
1.0.1	4/12/2018	Ludovic Robert	Corrected following Andreas Schlüter
4.0.0 Release 19.0	06/15/2019	Ludovic Robert	Corrected for R19.0

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