Introduction

The following is an idea to use filters to search collections of service qualification resources.

This assumes the underlying information to support these resource representations already exists to be searched.

The resource names have been carried over from the existing TMF645 specification in attempt to propose this as an extension to TMF645 rather than a new API.

I have attempted to use JSON path notation for the filter names to relate these back to the JSON resource representations in the specification.

General

```
GET /queryServiceQualification?fields=…&{filtering}
```

```
GET /checkServiceQualification?fields=…&{filtering}
```

List services available at a premises

```
GET /queryServiceQualification?searchCriteria.service.place.id=2345689
```

List services available at a premises of a particular service category

```
GET
/queryServiceQualification?searchCriteria.category.name="Fiber%20Access"&searchCriteria.service.place.id=23456
89
```

List services available at a premises with a working phone line and geographic phone number

```
GET
/queryServiceQualification?searchCriteria.service.serviceRelationship.service.supportingResource.name="+443894
775542"&searchCriteria.service.serviceRelationship.serviceRelationshipType="collocatedWith"
```

List services available for adding to a working line with a geographic phone number

```
GET
/serviceQualification?searchCriteria.service.serviceRelationship.service.supportingResource.name="+44389477554
2"&searchCriteria.service.serviceRelationship.serviceRelationshipType=" reliesOn"
```

Check whether a specific service specification and characteristics can be delivered to a specific premises

```
GET /checkServiceQualification?serviceQualificationItem.service.place.id=2345689&
serviceQualificationItem.service.serviceSpecification.name="TVAccess"&
serviceQualificationItem.service.serviceCharacteristic=[{"name":"BroadcastQuality","value":"4K"}]
```