



**Service Operations  
Specification  
MEF 53**

**Carrier Ethernet Services Qualification  
Questionnaire**

**December 2015**

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**Table of Contents**

1. List of Contributing Member Companies ..... 1

2. Abstract..... 1

3. Terminology and Acronyms..... 1

4. Scope..... 2

5. Compliance Levels ..... 2

6. Introduction..... 3

7. Use Cases..... 3

8. Process Flows..... 9

9. References ..... 11

10. Acknowledgements ..... 11

11. Ethernet Services Qualification Questionnaire..... 11

**List of Figures**

Figure 1 – Carrier Ethernet Services Qualification Questionnaire Use Case Diagram ..... 4

Figure 2 – Services Qualification Questionnaire Process Flow..... 10

**List of Tables**

Table 1 Contributing Member Companies ..... 1

Table 2 Terminology and Acronyms ..... 2

Table 3 Use Case 1 ..... 5

Table 4 Use Case 2 ..... 6

Table 5 Use Case 3 ..... 7

Table 6 Use Case 4 ..... 8

Table 7 Use Case 5 ..... 9

Table 8 Services Qualification Questionnaire Messages..... 11

## 1. List of Contributing Member Companies

The following Member companies of the MEF participated in the development of this document and have requested to be included in this list.

Member Company
CenturyLink
Colt
Comcast
Cox
EXFO
iconectiv
Verizon

Table 1 Contributing Member Companies

## 2. Abstract

This document specifies the processes, use cases and guidelines for a standardized MEF Carrier Ethernet Services Qualification Questionnaire that can be used by potential buying carriers to more efficiently find a selling carrier that matches their needs. The questionnaire will encompass MEF defined services and process alignment (quote/order/delivery/assurance/billing/etc.) information.

## 3. Terminology and Acronyms

This section defines the terms used in this document. In many cases, the normative definitions to terms are found in other documents. In these cases, the third column is used to provide the reference that is controlling, in other MEF or external documents.

Term	Definition	Reference
Access Provider	A CEN Operator that offers the Ethernet Access Service type.	MEF 33
Buyer	The entity ordering a Carrier Ethernet service or component of a service	
Carrier Ethernet Network (CEN)	A network from a Service Provider or network operator supporting the MEF service and architecture models	MEF 12.1
ENNI	Reference point representing the boundary between two Operator MENs that are operated as separate administrative domains	MEF 4
EVC	An association of two or more UNIs that limits the exchange of Service Frames to UNIs in the Ethernet Virtual Connection	MEF 10.3
NDA	Nondisclosure Agreement	
OVC	Operator Virtual Connection	MEF 26.1
Seller	The entity receiving the order and responsible for fulfilling the order	
Service Provider	A Service Provider is a CEN Operator providing EVC-based Ethernet Services(s)	This document
Service Provider Onboarding	The process of setting up a selling carrier service provider as an approved supplier of a buying carrier, enabling the buying carrier to purchase access type services from the selling carrier	This document
UNI	The physical demarcation point between the responsibility of the Service Provider and the responsibility of the Subscriber	MEF 10.3
Wholesale Partner Qualification Process	The process for qualifying Access Provider's for purposes procuring wholesale services. Qualification requirements are unique to each buying and/or selling carrier and are based upon the specific needs of their business	This document

Table 2 Terminology and Acronyms

## 4. Scope

This document defines the use cases and guidelines for a standardized MEF Carrier Ethernet Services Qualification Questionnaire. The purpose of this questionnaire is to encourage service providers buying Ethernet services to use MEF-standardized questions to reduce the time and effort required to obtain interconnect information from existing or potential access service provider partners.

## 5. Compliance Levels

The document does not specify normative requirements

## 6. Introduction

Telecommunications companies who purchase services from Access Providers are required to complete a technical verification process to ensure product alignment and overall network compatibility. This “qualification” process has led many companies to develop a questionnaire type document allowing them to obtain and assess an Access Provider’s service capability.

As more telecommunications companies require access services, the number of unique technical questionnaires is increasing thus making the pre-qualification process cumbersome for Access Providers. Having company-specific questionnaires, requesting similar product information in an array of formats and terminology, has become repetitious and onerous for both parties (the Buyer and Seller) as they work to establish a partner relationship.

While the wholesale model is rapidly expanding throughout the industry, the need for a standardized qualification process is necessary to effectively and efficiently partner with Access Providers who share the same business objectives. Adopting and populating a single standardized Ethernet services qualification questionnaire will significantly increase the efficiency of Wholesale Partner Qualification Process, reduces the number of unique instances of service provider questionnaires to be filled out, allow for a more rapid delivery of such capabilities, and increase the positive impact of MEF Specifications and the SOC in the general marketplace outside of the MEF membership. By using common MEF terminology and definitions in the questionnaire, it will help drive more industry alignment.

In order to streamline the Wholesale Partner Qualification Process, a standardized Services Questionnaire will need to be developed and implemented across the industry. Adopting this model will require collaboration of experienced Service Providers and other telecommunications companies interested in access type products. This will normalize and standardize the service information exchange between service providers across the entire service lifecycle.

The standardization of this questionnaire content is a requirement to automate the Wholesale Partner Qualification Process.

## 7. Use Cases

This section captures the Use Cases for the Carrier Ethernet Services Qualification Questionnaire.

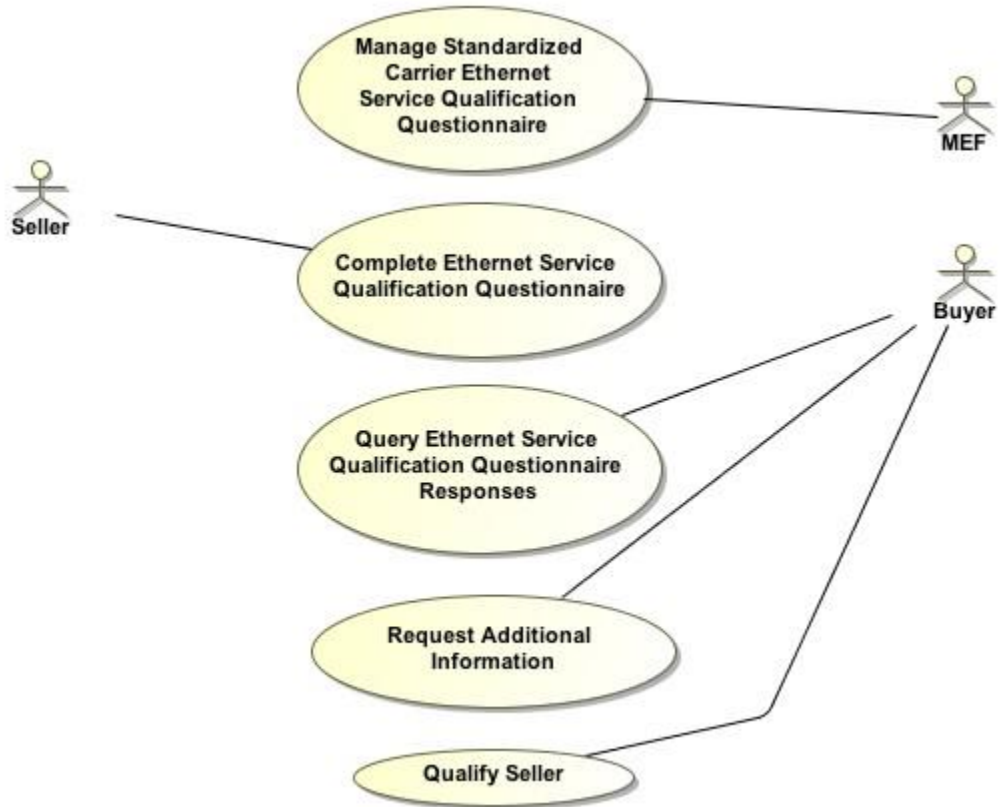


Figure 1 – Carrier Ethernet Services Qualification Questionnaire Use Case Diagram

Field	Description
Use Case #	1
Use Case Name	Manage Standardized Carrier Ethernet Service Qualification Questionnaire
Description	The MEF may opt to create, update, or remove questions/parameters from the MEF standardized Ethernet Service Qualification Questionnaire.
Actors	MEF Forum
Pre-Conditions	1. A change to the Standardized Carrier Ethernet Service Qualification Questionnaire has been identified
Process Steps	2. The change (create, update, remove) to the Standardized Carrier Ethernet Service Qualification Questionnaire is vetted through the MEF Service Operations Committee process
Post-Conditions	1. An updated version of the Standardized Carrier Ethernet Service Qualification Questionnaire is produced
Alternative Paths	None
Assumptions	MEF will continue to manage the Carrier Ethernet Service Qualification Questionnaire in the future.
References	None

Table 3 Use Case 1



Field	Description
Use Case #	2
Use Case Name	Complete Ethernet Service Qualification Questionnaire
Description	The Seller accesses the Standardized MEF Carrier Ethernet Service Qualification Questionnaire and populates the questionnaire with the Seller's answers/values.
Actors	Seller (The Seller must be a Service Provider or Access Provider)
Pre-Conditions	<ol style="list-style-type: none"> <li>1. If the Seller's Product Catalog includes a Product Offering, the questionnaire should be associated with that Product Offering. Multiple Offers can be associated with a single questionnaire.</li> </ol>
Process Steps	<ol style="list-style-type: none"> <li>1. Seller obtains the MEF standardized Carrier Ethernet Service Qualification Questionnaire</li> <li>2. Seller fills out (completes) MEF standardized Carrier Ethernet Service Qualification Questionnaire for products 1 to N</li> </ol>
Post-Conditions	<ol style="list-style-type: none"> <li>1. Seller has a filled in Carrier Ethernet Service Qualification Questionnaire for products 1 to N in a place where it can be obtained by buying Ethernet carriers</li> </ol>
Alternative Paths	None
Assumptions	None
References	MEF Standardized Carrier Ethernet Services Qualification Questionnaire

Table 4 Use Case 2

Field	Description
Use Case #	3
Use Case Name	Query Ethernet Service Qualification Questionnaire Responses
Description	The Buyer queries/downloads the responses from the Seller completing the Carrier Ethernet Service Qualification Questionnaire
Actors	Buyer
Pre-Conditions	<ol style="list-style-type: none"> <li>1. The Seller must have completed the Carrier Ethernet Service Qualification Questionnaire</li> <li>2. The Buyer must have been pre-authorized by the Seller (e.g. NDA in place)</li> </ol>
Process Steps	<ol style="list-style-type: none"> <li>1. The Buyer collects data from the Carrier Ethernet Service Qualification Questionnaire <ol style="list-style-type: none"> <li>a. Obtain completed Carrier Ethernet Service Qualification Questionnaire from service provider</li> </ol> </li> </ol>
Post-Conditions	<ol style="list-style-type: none"> <li>1. The Buyer has obtained the completed Carrier Ethernet Service Qualification Questionnaire from the Seller.</li> </ol>
Alternative Paths	<ol style="list-style-type: none"> <li>1. The Buyer obtains a partially completed questionnaire and requests additional information using Use Case #4.</li> <li>2. The Buyer needs clarification on the completed questionnaire and requests additional information using Use Case #4.</li> </ol>
Assumptions	None
References	None

Table 5 Use Case 3

<b>Field</b>	<b>Description</b>
Use Case #	4
Use Case Name	Request Additional Information
Description	If the Buyer needs additional information related to Carrier Ethernet Service Qualification Questionnaire content or process, or clarification of an existing question in the questionnaire, the Buyer may initiate this request
Actors	Buyer
Pre-Conditions	<ol style="list-style-type: none"> <li>1. The Seller must have completed the Carrier Ethernet Service Qualification Questionnaire</li> </ol>
Process Steps	<ol style="list-style-type: none"> <li>1. The Buyer sends questions related to specific questions in the Carrier Ethernet Service Qualification Questionnaire to the Seller</li> <li>2. The Buyer sends a new question related to the questionnaire process to the Seller</li> <li>3. Seller responds accordingly to the Buyer</li> </ol>
Post-Conditions	<ol style="list-style-type: none"> <li>1. The Buyer receives acceptable answers from the Seller</li> </ol>
Alternative Paths	<ol style="list-style-type: none"> <li>1. The Buyer receives unacceptable answers from the Seller and resubmits a second query.</li> </ol>
Assumptions	None
References	None

Table 6 Use Case 4

Field	Description
Use Case #	5
Use Case Name	Qualify Seller
Description	If the Buyer accepts the Carrier Ethernet Service Qualification Questionnaire answers/parameters from the Seller, the Buyer will respond with an acceptance qualifying the Seller as a potential candidate for an on-boarded Service Provider
Actors	Buyer
Pre-Conditions	<ol style="list-style-type: none"> <li>1. The Seller must have completed the Carrier Ethernet Service Qualification Questionnaire (which includes mapping the Seller's products to MEF product catalog)</li> <li>2. The Buyer must have obtained a completed Carrier Ethernet Service Qualification Questionnaire from the Seller</li> </ol>
Process Steps	<ol style="list-style-type: none"> <li>1. The Buyer will respond with an acceptance that the Seller's Questionnaire meets their purchasing criteria</li> </ol>
Post-Conditions	<ol style="list-style-type: none"> <li>1. The Service Provider Onboarding process will begin</li> </ol>
Alternative Paths	<ol style="list-style-type: none"> <li>2. The Buyer will respond with a rejection that the Seller's Questionnaire does not meet their purchasing criteria</li> </ol>
Assumptions	None
References	None

Table 7 Use Case 5

## 8. Process Flows

Refer to the Generic Service Lifecycle Product Lifecycle Management process flows [1] for the high level Services Qualification Questionnaire process flows. A detailed process flow for the Buyer and Seller is illustrated in this section. Specific questions as shown under the Seller process workflow are tailored to particular product offerings which include different service components. For example, if the Seller is offering an OVC service, questions centered around OVC, UNI and ENNI service components are required. If a Seller happens to be offering a product based on the EVC service definitions, questions centered around EVC and UNI service components are required. Some question sets are applicable to all product offerings, such as Performance and Fault Management.

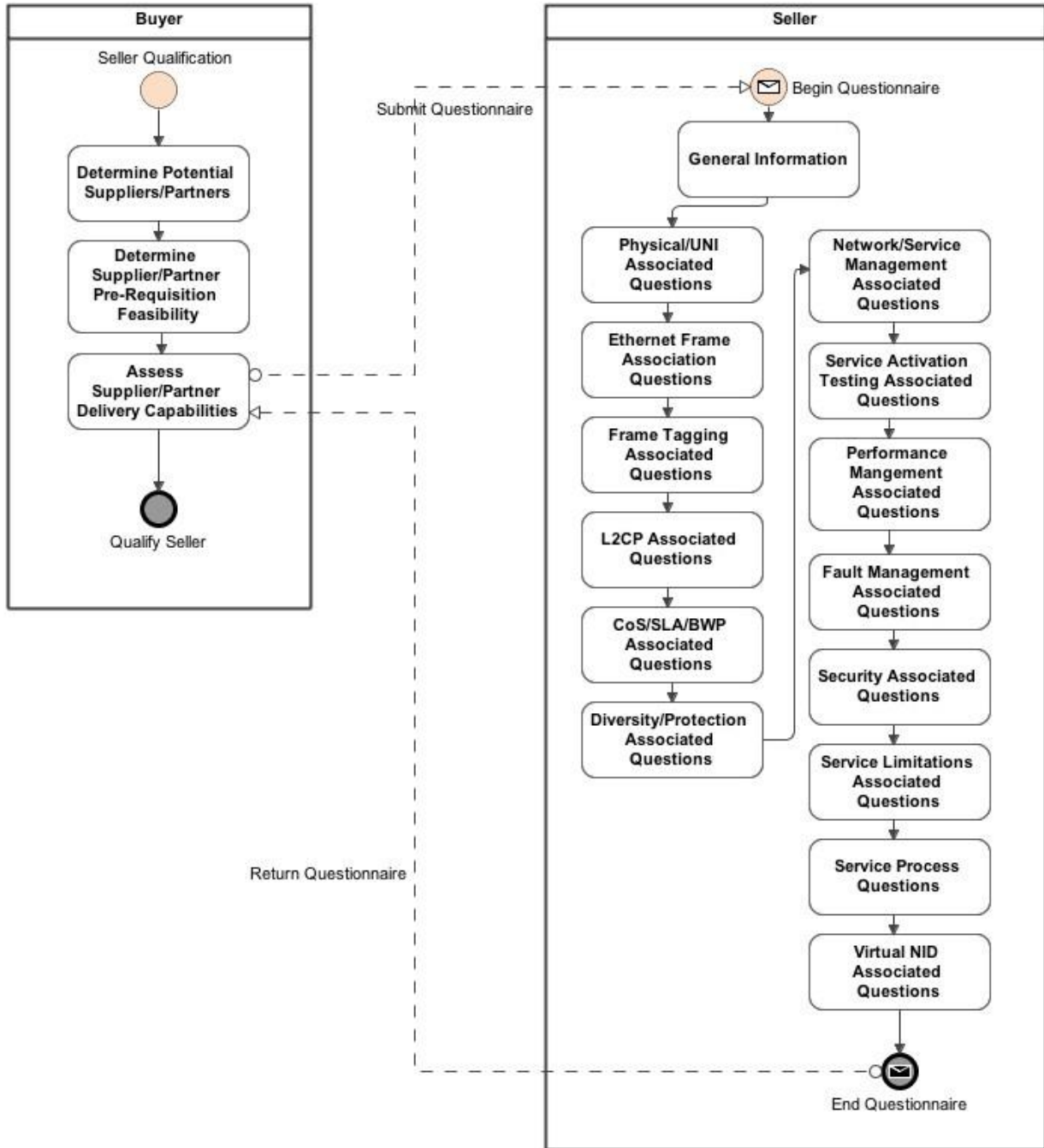


Figure 2 – Services Qualification Questionnaire Process Flow

Message	Originator	Receiver	High Level Description
Submit Questionnaire	Buyer	Seller	Buyer requests Seller to populate and return Services Qualification Questionnaire. Buyer may provide Seller the actual questionnaire or a link to an online questionnaire.
Return Questionnaire	Seller	Buyer	Seller returns the populated questionnaire. Seller may provide the actual filled in questionnaire, or an electronic response to an online link where the questionnaire was populated.

Table 8 Services Qualification Questionnaire Messages

## 9. References

- [1] MEF 50, Carrier Ethernet Service Lifecycle Process Model, Service Operations Guidelines, MEF Forum, December 2014.

## 10. Acknowledgements

This document was prepared by contributions from the following members of the MEF Service Operations Committee:

- Colin Stormont, Comcast (Editor)
- Bruce Eldridge, CenturyLink
- Matthias Homann, Colt
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- Brian Hedstrom, MEF
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- Raghu Ranganathan, Ciena
- Mike Bencheck, Verizon/Siama

## 11. Ethernet Services Qualification Questionnaire

This specification is complemented by a data spreadsheet available at [https://www.mef.net/Assets/Technical\\_Specifications/XLS/MEF-53-Ethernet-Services-Qualification-Questionnaire.xlsx](https://www.mef.net/Assets/Technical_Specifications/XLS/MEF-53-Ethernet-Services-Qualification-Questionnaire.xlsx)