End User Advisory Group

Analysis of survey result

ONAP consumption model survey

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Introduction

- **Background:** In the process of ONAP Consumption Model white paper, we lag of feedback from CSPs ,and many parts in white paper still need input from volunteer. In order to promote the progress of the white paper, we propose to design this survey, which covers questions about ONAP deployment situation and other topics that many CSPs care about. We try to help output the results of the survey to EUAG group for analysis, which will not only promote the progress of white paper and also optimize the work in ONAP community (mainly about ONAP TSC).

- **Participants:** EUAG Group

- **Response:** 11 participants， anonymous

- **Design of survey:** 15 Ques , cover different parts in ONAP consumption

Responses (by day)

First: 1/28/2020   Zoom: 1/26/2020 to 2/1/2020
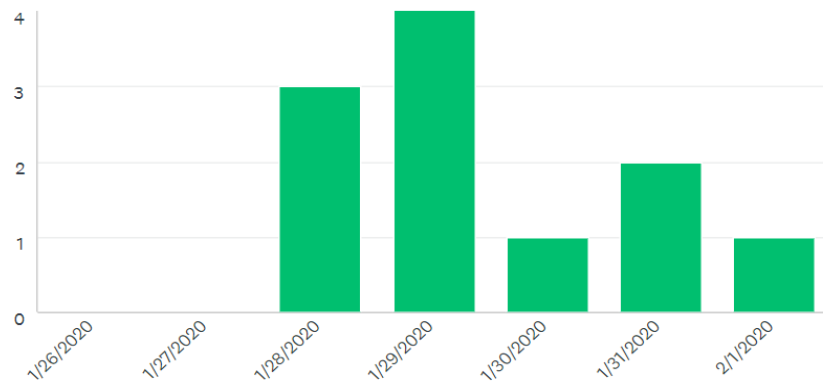
1.Consumption models and adoption plan
- The renamed consumption models CSP choose for ONAP in the near future (within one year)?
- The adoption plan for ONAP consumption model?

2.Cooperation
- Cooperation way of in-house R&D team with third-party partners?
- How does community teams, in-house product team and network operation team coordinate?

3.Participation in community work
- Participate in requirements discussion.
- Participate in requirements and architecture discussion.
- Participate in integration test.
- Participate in module implementation.

4.ONAP application and deployment pattern
- ONAP deployment pattern?
- Application scenarios supported by ONAP?

5.Network management domains and close-loop operation types
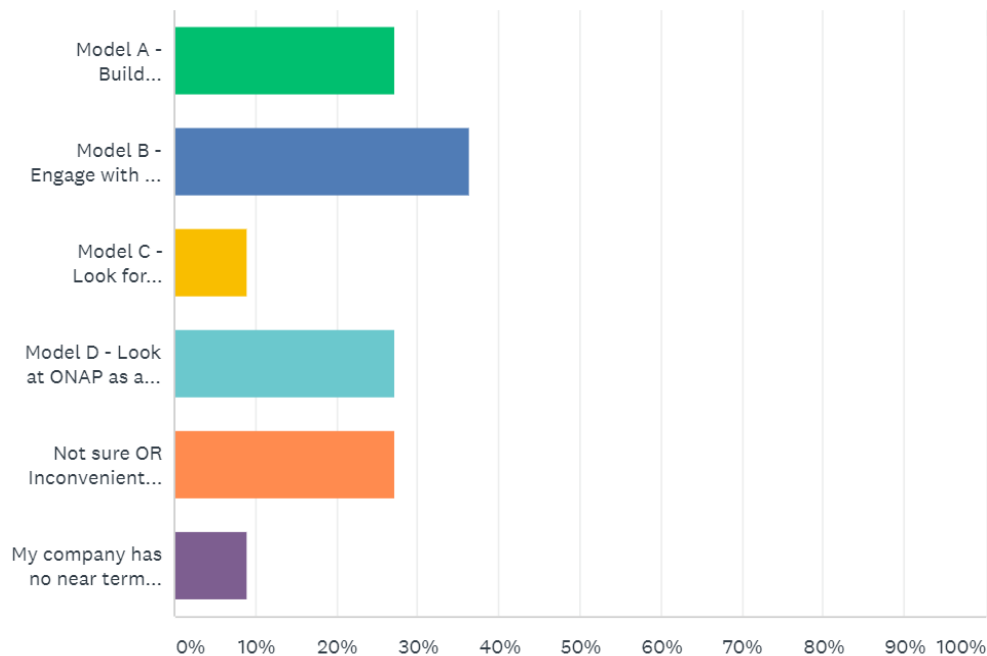- Network management domains adopted ONAP?
- What types of close-loop operation for NFV network functions are enabled in ONAP adoption?

6.Relationship between ONAP and traditional OSS
- Describe the objects managed by ONAP and traditional OSS separately.

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Q1 (Participants: 11)

› Q1. For the four consumption models listed, which one does your company plan to adopt for ONAP in the near future (within one year)?　(Multiple Choice)
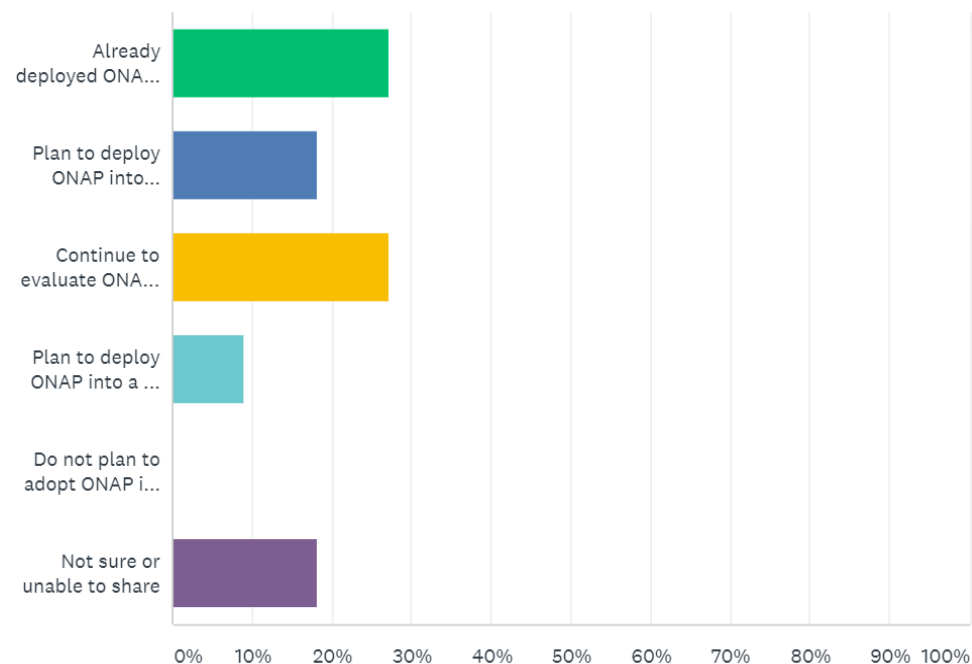

ANSWER CHOICES	RESPONSES	
Model A - Build competency & deliver ONAP in-house, in which the CSP conducts product-based R&D based on community code for its own production adoption.	27.27%	3
Model B - Engage with a System Integrator / Principal Vendor who can do it for them, in which an identified System Integrator / Principal Vendor takes the ownership of development, testing & deployment - means CSPs are still in control, but are doing it in a "Delegated" mode.	36.36%	4
Model C - Look for distribution by professional outfits, in which the CSPs purchases an open source service provider's community-based product support service.	9.09%	1
Model D - Look at ONAP as a reference implementation, and choose a partner/vendor which does similar or all of the same functionalities, in which the CSP refers to open source architecture and implementation specifications to publish enterprise specifications, and purchases vendors' compliant software products.	27.27%	3
Not sure OR Inconvenient to disclose	27.27%	3
My company has no near term plans to adopt ONAP	9.09%	1
Total Respondents: 11		

•**Recommendations:**

The result of this question is in the form of small part of aggregation, in which each consumption model is basically used by more than two companies. Therefore, we recommend that the Consumption Model section in the white paper should more comprehensively analyze the relevant content of each model, and consider adding more examples for each model analysis. Perhaps we can consider specifically describing those models which have more responses.

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Q2（Participants：11)

› Q2.In the near term (within one year), what level of ONAP adoption does your company plan to achieve?

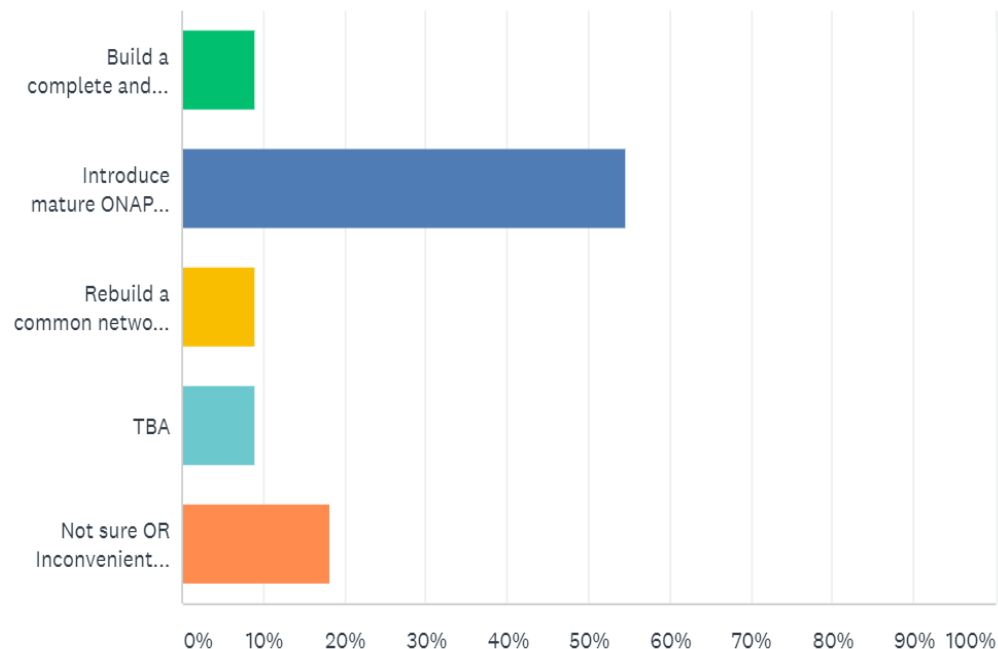| ANSWER CHOICES	RESPONSES	
Already deployed ONAP into Production	27.27%	3
Plan to deploy ONAP into Production	18.18%	2
Continue to evaluate ONAP in the lab	27.27%	3
Plan to deploy ONAP into a lab for the first time to begin evaluation.	9.09%	1
Do not plan to adopt ONAP in the next year	0.00%	0
Not sure or unable to share	18.18%	2

• **Recommendations：**

For CSPs who've chosen "not sure or unable to share", what are their current difficulties? If we could know their difficulties, we might be able to suggest ONAP community lower the evaluation threshold and help promote community's ecology.

Q3 （Participants： 11 ）

› Q3. In terms of your consumption model and corresponding plans, which one does your company choose for ONAP consumption?
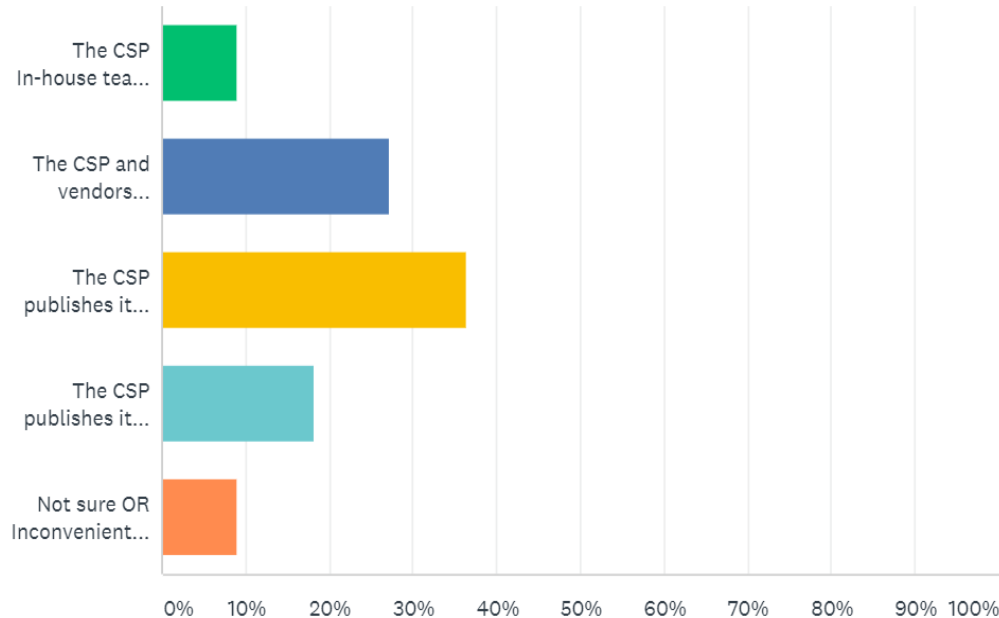

ANSWER CHOICES	RESPONSES	
Build a complete and common platform for all the service scenarios.	9.09%	1
Introduce mature ONAP components (e.g., APPC, DCAE, SO, etc) one-by-one on a per application scenario basis(means use cases , e.g. CCVPN, VoLTE, etc.), with special focus on interoperability between newly introduced components and existing OSS.	54.55%	6
Rebuild a common network management architecture independent of the service scenarios in future, and introduce partial mature components in community as required.	9.09%	1
TBA	9.09%	1
Not sure OR Inconvenient to disclose	18.18%	2
TOTAL		11

• **Recommendations：**
➢What is the difference between HUW and ONAP? Why choose ONAP based HUW instead of ONAP directly?
➢We recommend participants listing the application scenarios and the corresponding components, and write down relevant experiences in white paper consumption model part.

Q4（Participants：11）

› Q4. How does your in-house R&D team work with third-party partners with respect to developing and deploying ONAP in your company?
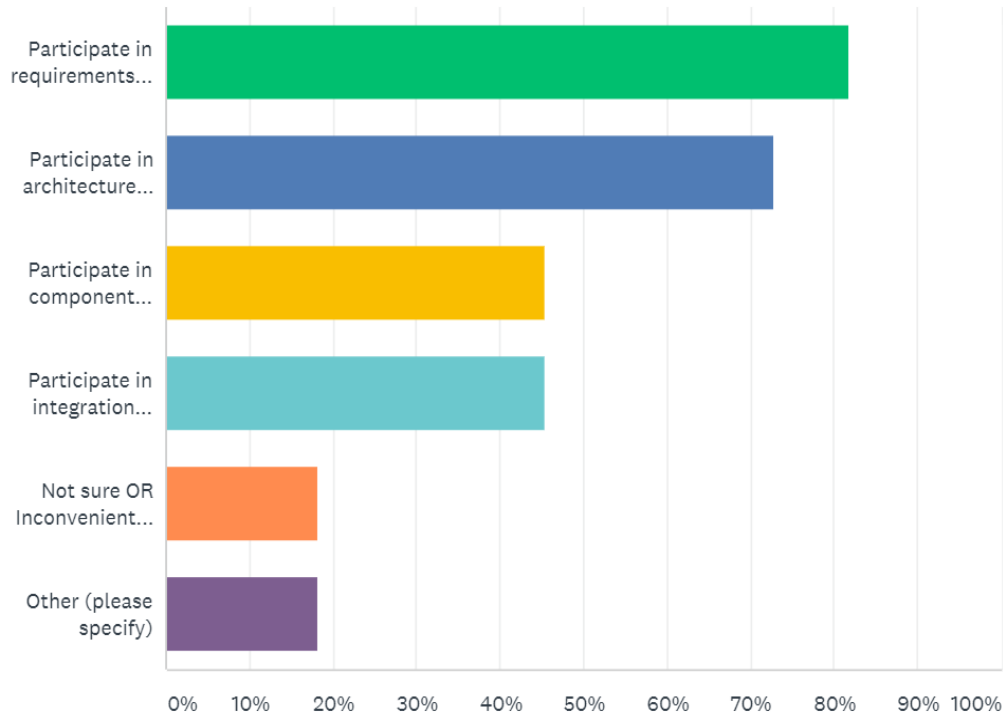

ANSWER CHOICES	RESPONSES	
The CSP In-house team is responsible for design, development, deployment, testing, and operation of ONAP.	9.09%	1
The CSP and vendors collaborate in design, development, and testing. The CSP is responsible for deployment and operation.	27.27%	3
The CSP publishes its own enterprise specifications (e.g. technical architecture, functional requirements, interface protocols, information models) for procurement from vendors, with consideration on community adoption/compliance. The CSP is responsible for test, deployment and operation.	36.36%	4
The CSP publishes its own enterprise specifications (e.g. technical architecture, functional requirements, interface protocols, information models) for procurement from vendors, without consideration on community adoption or compliance. The CSP is responsible for test, deployment and operation.	18.18%	2
Not sure OR Inconvenient to disclose	9.09%	1
TOTAL		11

•**Recommendations：** Most of CSPs responses that they participate in ONAP deployment, testing and operation. We recommend introducing their experiences in white paper.

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Q5 （Participants： 11 ）

› Q5. How do you participate in the ONAP community, either by your own employee or the vendor/3rd party who is paid by your company? （Multiple Choice)

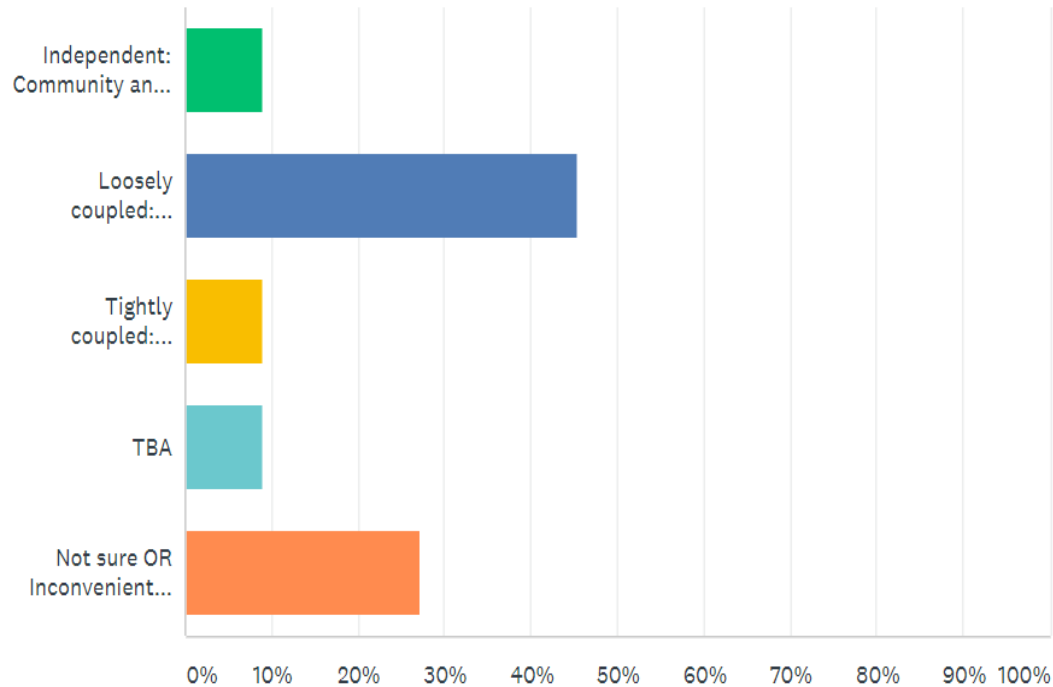| ANSWER CHOICES	RESPONSES	
Participate in requirements discussion in community.	81.82%	9
Participate in architecture discussion in community.	72.73%	8
Participate in component development in community.	45.45%	5
Participate in integration test in community.	45.45%	5
Not sure OR Inconvenient to disclose	18.18%	2
Other (please specify) Responses	18.18%	2

Mainly in EUAG and ONAP Design

1/29/2020 3:03 AM

As you can see from my current participation in the EUAG LFN, today we are trying to participate in the community listening and trying to learn from it and giving our opinion when that is possible. Unfortunately we do not have the scale to have a more active participation and most of the times neither resources or time enough to dedicate to the community or SDOs (anyway this is one of the items we have to review based on the selected model we pick from Question 1 answer).

• **Recommendations：**
  EUAG should serve as a window for CSPs to observe industry trend, as well as communicate with each other and provide some effective suggestions for CSPs who have not yet decided to participate in a specific open source community.

› Q6. How does your ONAP open source team, in-house product team and network operation team coordinate?

ANSWER CHOICES	RESPONSES	
Independent: Community and product teams, as well as operation teams are independent from each other with no internal regular communication and common planning.	9.09%	1
Loosely coupled: Community and product teams, as well as operation teams are independent from each other, but have internal regular communication and coordinated planning.	45.45%	5
Tightly coupled: Community and product teams, as well as operation teams are part of a single work group or internal organization. They make plans together regularly.	9.09%	1
TBA	9.09%	1
Not sure OR Inconvenient to disclose	27.27%	3
TOTAL		11

•**Recommendations：**

➢In white paper, we recommend add contents describe coordination model between ONAP open source team, in-house product team and network operation team. And there may be some combined cooperation model based on specific project requirements in some CSPs. Perhaps in the future, tightly coupled will be a potential direction, but at present ,community is still dominated by loosely coupled model.

➢For the CSP who expressed a swing attitude between option B and C in comment, we recommend they describe the reasons for their hesitation and probably add these info to white paper as a case sharing.

➢ We recommend who choose option A-independent model describe their model in white paper as a case sharing.

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› Q7-Q8.Services supported by ONAP in production? OR in lab?（Multiple Choice）
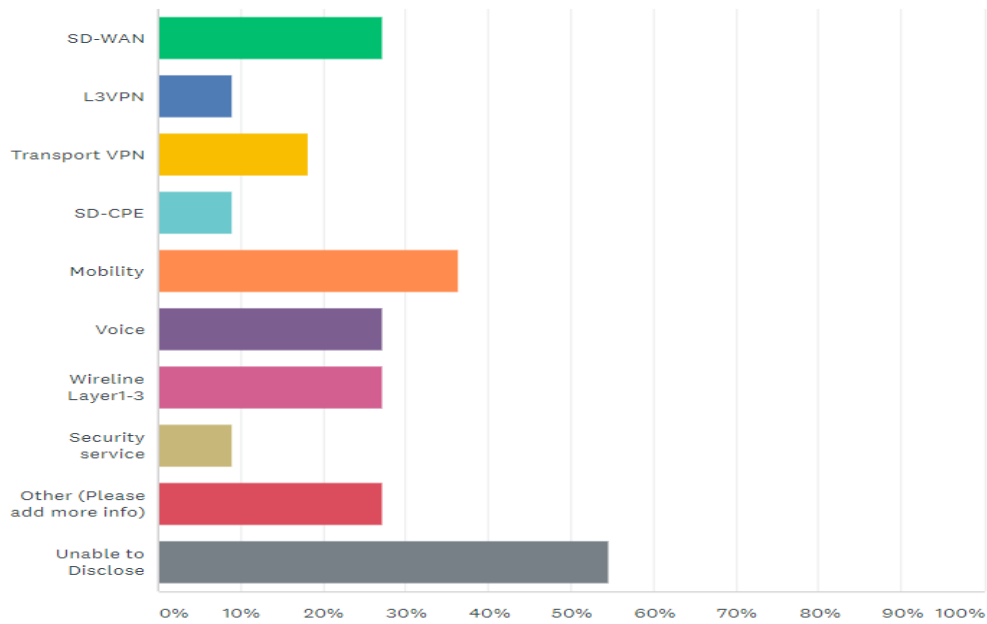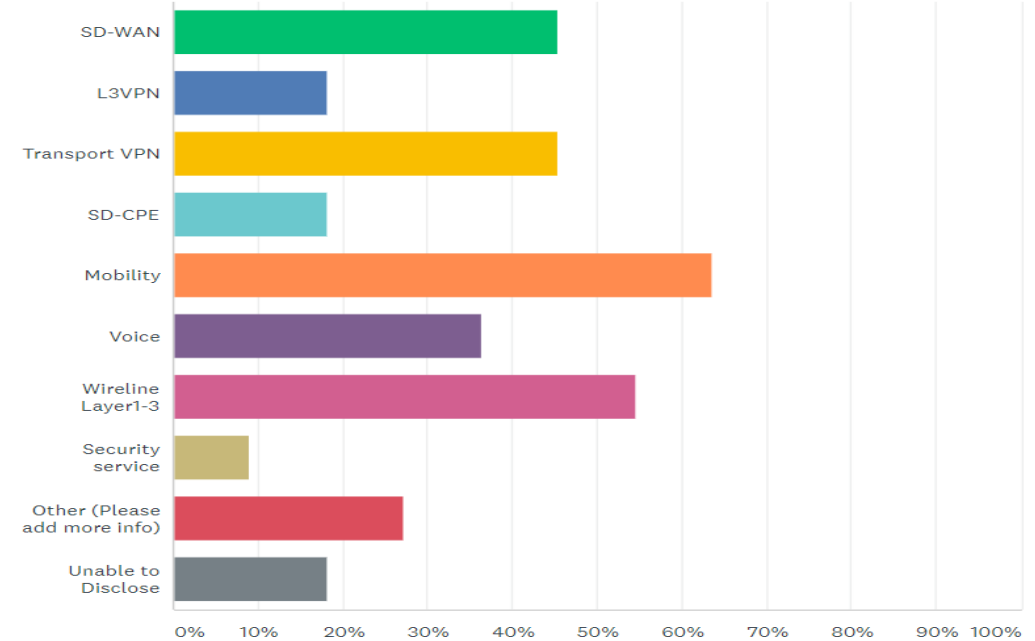

Fig1. Q7 feedback

Fig2. Q8 feedback

•**Recommendations**：
Recommend CSPs who have deployed ONAP in production to write down their successful service experience in white paper.
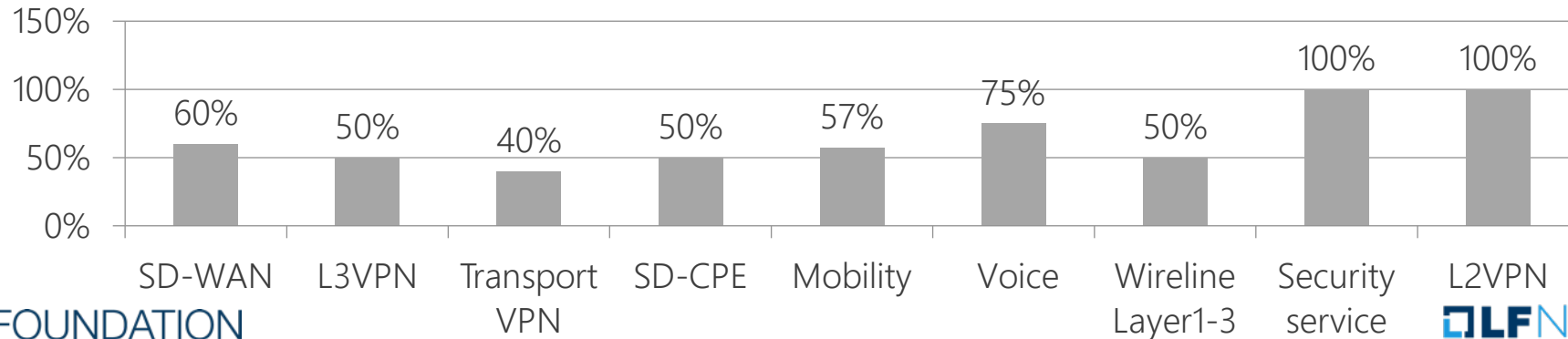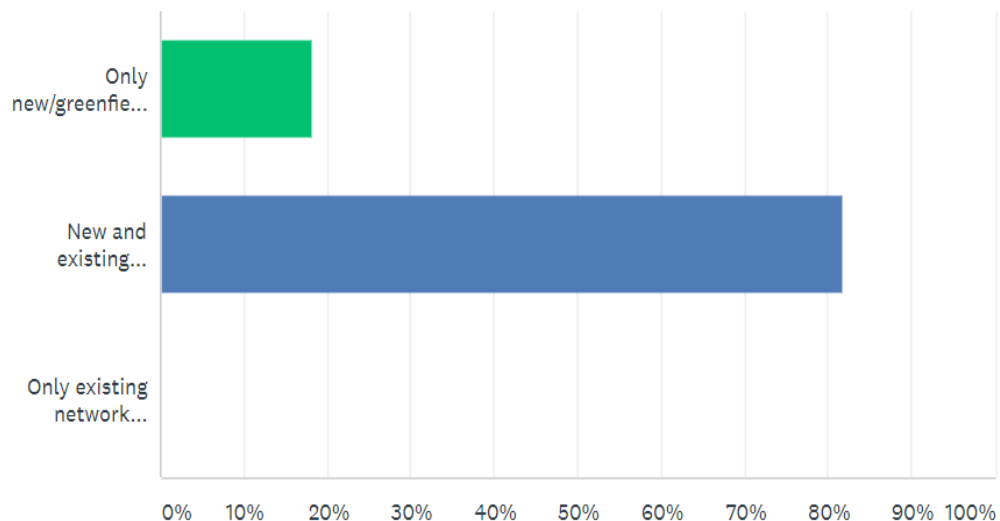

Fig3. Services in production/in lab= service maturity

Q9（Participants：11）

› Q9. What workloads does/will ONAP manage when it is deployed?

ANSWER CHOICES	RESPONSES	
Only new/greenfield network workloads	18.18%	2
New and existing network workloads	81.82%	9
Only existing network workloads	0.00%	0
TOTAL		11

•Recommendations：

➢ 81.82% responses ONAP manage both new and existing network workloads. What kind of workload is new , and what about existing workload? Can we describe them in whitepaper and give some examples in it?

➢ Difference between network element and workload?

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Q10. （Participants: 11）

› Q10. In your current or planned deployment of ONAP, will it be integrated with existing OSS systems?
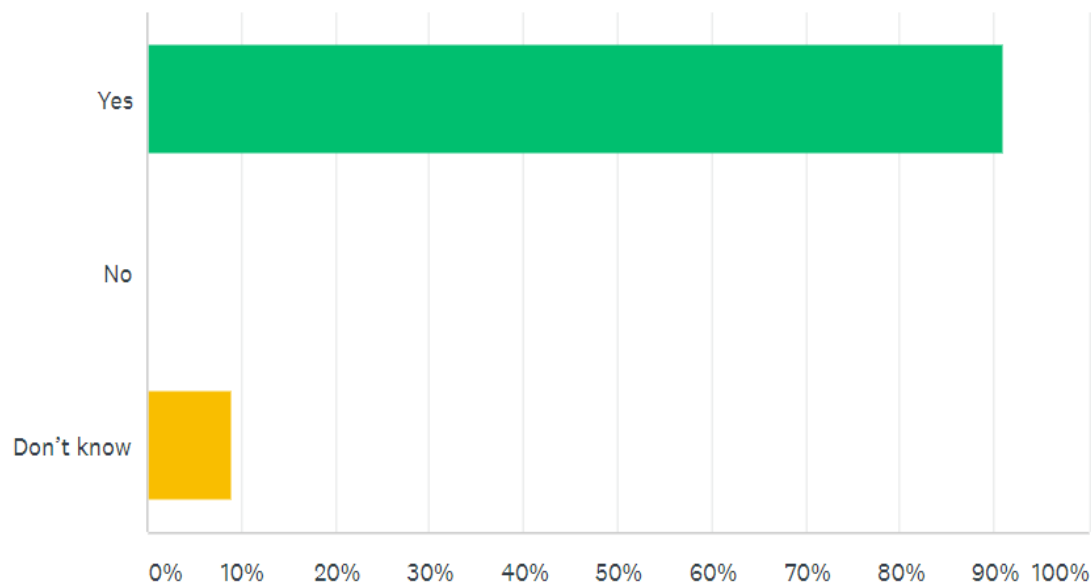
ANSWER CHOICES	RESPONSES	
Yes	90.91%	10
No	0.00%	0
Don't know	9.09%	1
TOTAL		11

•**Recommendations:**

➤ Most of participants said they choose to integrate ONAP with the existing OSS system in current and planned deployment, this result might indicate CSP focus trend about the relationship between ONAP and OSS.

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Q11 （Participants：11）

› Q11. Synchronization/integration pattern between ONAP & OSS'es ?
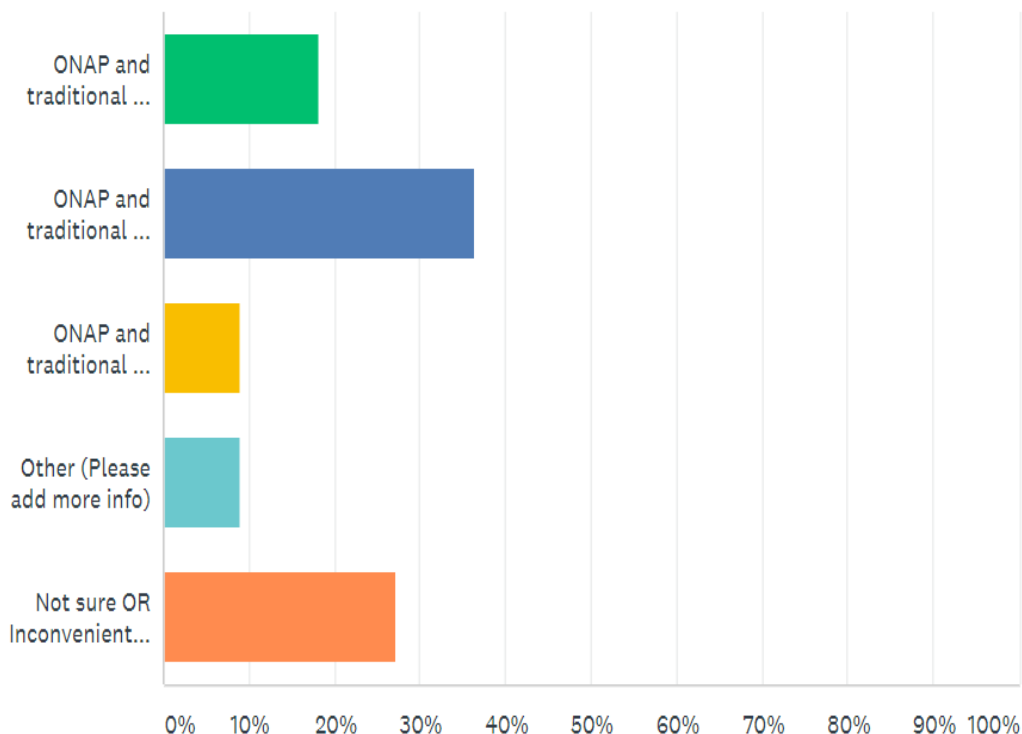
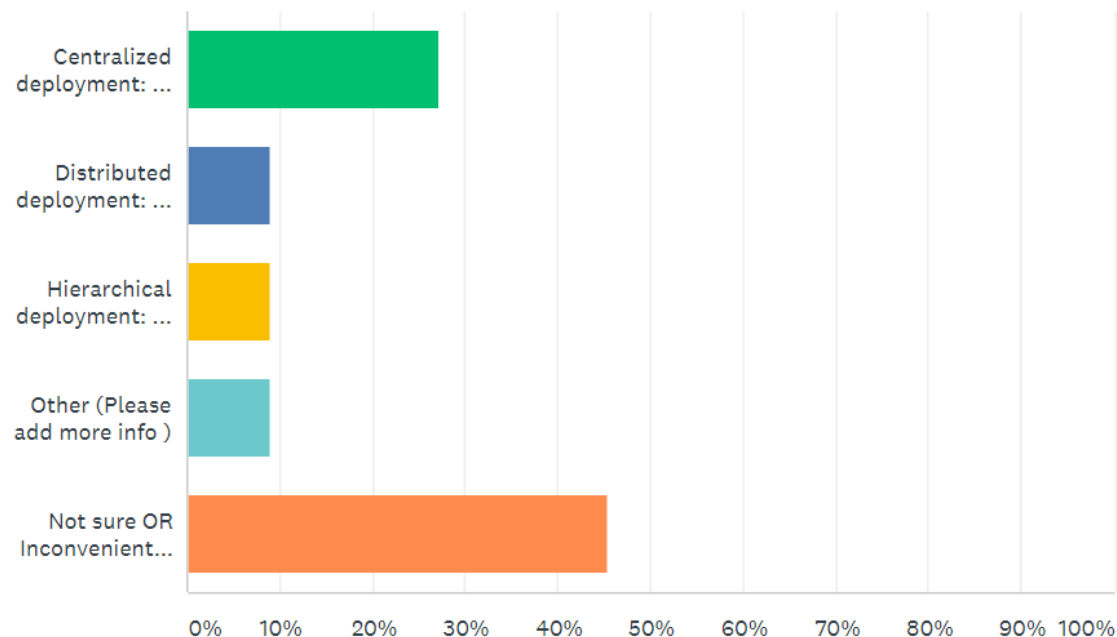| ANSWER CHOICES	RESPONSES	
ONAP and traditional OSS manage different management objects, are constructed separately, operate independently of each other, responsible for end-to-end service provisioning and alarm performance monitoring respectively.	18.18%	2
ONAP and traditional OSS manage different management objects, are constructed separately, while ONAP is responsible for directly managing new network elements and providing unified information to traditional OSS for end-to-end service provisioning.	36.36%	4
ONAP and traditional OSS manage different management objects, are constructed separately, while OSS is responsible for directly managing traditional network elements and providing unified information to ONAP for end-to-end service provisioning.	9.09%	1
Other (Please add more info)	9.09%	1
Not sure OR Inconvenient to disclose	27.27%	3
TOTAL		11

• **Recommendations:** Some CSPs commented different integration patterns are determined according to different situations or use cases. At the same time, the integration of ONAP with third-party southbound components (such as EMS, domain controller, etc.) is also the key to be considered. We recommend these contents as supplement in white paper.

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Q12（Participants：11）

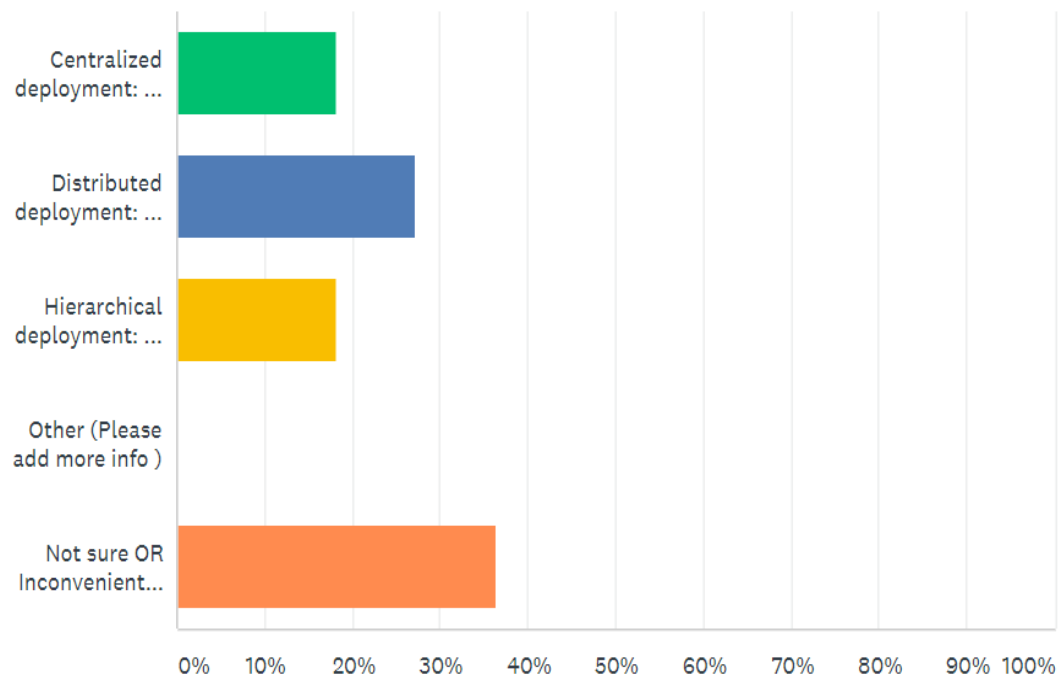› Q12. ONAP deployment pattern in production?

ANSWER CHOICES	RESPONSES	
Centralized deployment: one logical copy of ONAP for the entire network	27.27%	3
Distributed deployment: one logical copy of ONAP for each managed domain or network domain.	9.09%	1
Hierarchical deployment: one logical copy of ONAP for each geographical area, under the supervision of another upper-layer ONAP, who is responsible for end-to-end service provisioning and communication with traditional OSS.	9.09%	1
Other (Please add more info)	9.09%	1
Not sure OR Inconvenient to disclose	45.45%	5
TOTAL		11

- **Recommendations：**

➢ White Paper：Recommend describing these different deployment patterns in more detail. And consider adding examples for each patterns.

➢ EUAG and ONAP TSC：Hierarchical pattern is CSPs common requirement，EUAG group might need to specify this requirement, and probably let TSC provide related architecture and implementation solutions.

Q13 （Participants：11 ）

› Q13. ONAP deployment pattern in consideration for future deployment?

ANSWER CHOICES	RESPONSES	
Centralized deployment: one logical copy of ONAP for the entire network	18.18%	2
Distributed deployment: one logical copy of ONAP for each managed domain or network domain.	27.27%	3
Hierarchical deployment: one logical copy of ONAP for each geographical area, under the supervision of another upper-layer ONAP, who is responsible for end-to-end service provisioning and communication with traditional OSS.	18.18%	2
Other (Please add more info)	0.00%	0
Not sure OR Inconvenient to disclose	36.36%	4
TOTAL		11

- **Recommendations：**

➢ White Paper： Recommend describing these different deployment patterns in more detail. And consider adding examples for each patterns **from two aspects- in production and future plan.**

➢ EUAG and ONAP TSC： Hierarchical pattern is CSPs common requirement， EUAG group might need to specify this requirement, and probably let TSC provide related architecture and implementation solutions.

Q14 to Q15 （Participants： 11 ）

› Q14. What types of operations for NFV network functions are enabled in your ONAP adoption in production? **OR in consideration for future deployment?** (Multiple Choice)
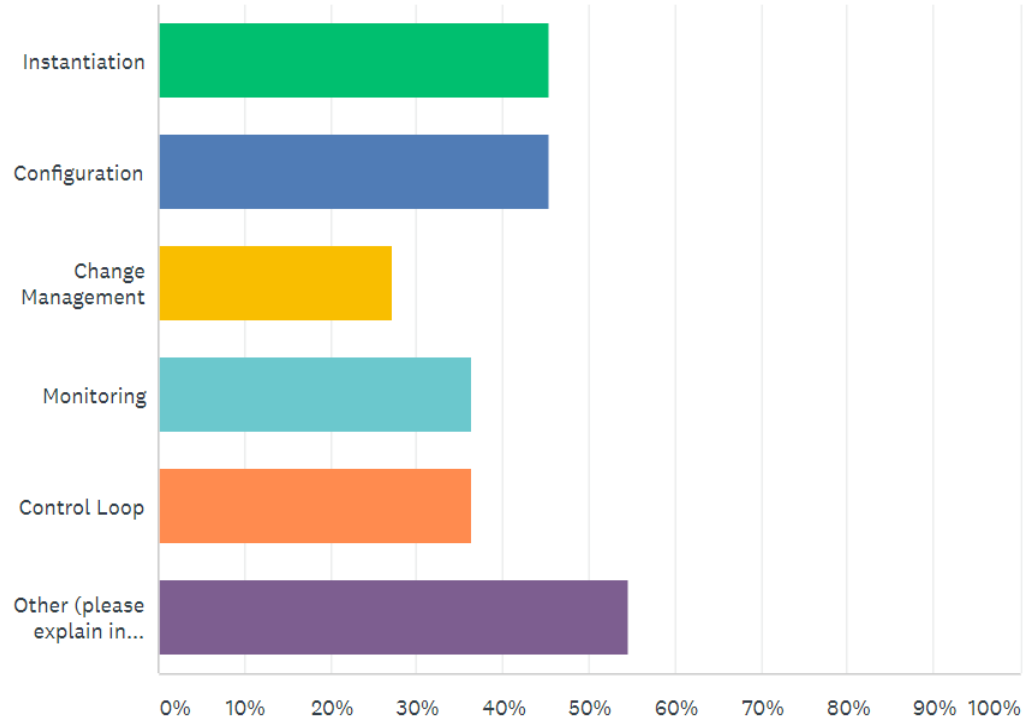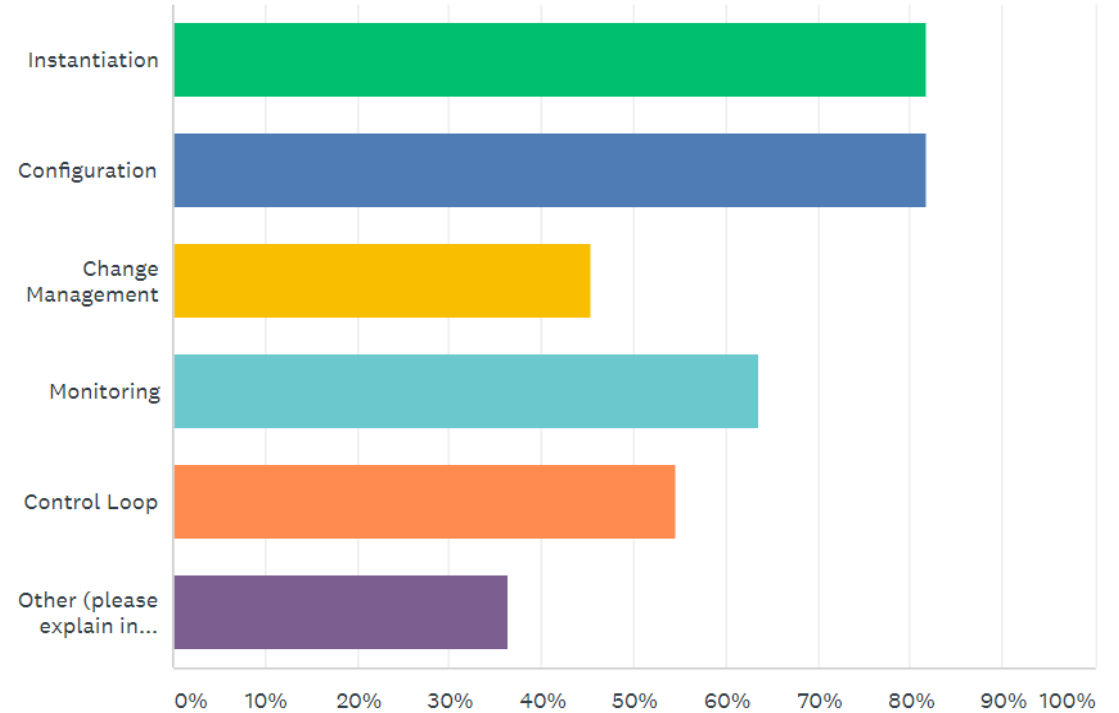

Fig1. Q14 feedback

Fig2. Q15 feedback

- **Recommendations：**

➤ TBA

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Summary. For white paper-Part1

› Q1: Recommend that the Consumption Model section in the white paper should more comprehensively analyze the relevant content of each model, and consider adding more examples for each model analysis. Perhaps we can consider specifically describing those models which have more responses.

› Q3: Recommend participants to list the application scenarios and the corresponding components, and write down relevant experiences in white paper consumption model part.

› Q4: Recommend CSPs to introduce their experiences about ONAP deployment, testing and operation in white paper.

› Q6:

1. Recommend adding contents describe coordination model between ONAP open source team, in-house product team and network operation team in white paper. And there may be some combined cooperation model based on specific project requirements in some CSPs.

2. For the CSP who expressed a swing attitude between option B and C in comment, recommend they describe the reasons for their hesitation and probably add these info to white paper as case sharing.

3. Recommend who choose option A-independent model describe their model in white paper as a case sharing.

› Q7-Q8:Recommend CSPs who have deployed ONAP in production to write down their successful service experience in white paper.

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Summary. For white paper-Part2

› Q9: 81.82% responses ONAP manage both new and existing network workloads. What kind of workload is new , and what about existing workload? Recommend describing them in whitepaper and give some examples in it.

› Q10-Q11: Most of CSPs consider integrating ONAP with OSS, we recommend adding related contents in white paper. And about integration pattern, some CSPs commented different integration patterns are determined according to different situations or use cases. At the same time, the integration of ONAP with third-party southbound components (such as EMS, domain controller, etc.) is also the key to be considered. We recommend these contents as supplement in white paper.

› Q12-Q13:

   1. Recommend describing these different ONAP deployment patterns in more detail. And consider adding examples for each patterns **from two aspects- in production and future plan.**

   2. Hierarchical pattern is CSPs common requirement, EUAG group might need to specify this requirement, and probably let TSC provide related architecture and implementation solutions.

➤ **,etc.... Complements, TBA**

Summary. For ONAP TSC

› Q1-Q2:

1. Recommend investigating the difficulties of the CSPs who've chosen "not sure or unable to share, we might be able to suggest ONAP community (e.g. ONAP TSC) lower the evaluation threshold and help promote community's ecology.

2. It can be concluded from the feedback of Q1 that functions of ONAP should be more enhanced and interoperability should be improved.

› Q3: Recommend deeper understanding those ONAP-based orchestrators, such as HUW. What is the difference between them and ONAP, why did some CSPs choose to use HUW instead of ONAP in some regions, and what problems and difficulties need to be solved in ONAP application.

› Q9 –Q11: The ONAP architecture needs to be lighter and more standardized, and to further interface with traditional OSS, as well as strengthen platform interoperability .

› Q13: Learn experiences from the CSPs who choose hierarchical pattern as ONAP deployment pattern in future, EUAG group might need to specify this requirement, and probably let TSC provide related architecture and implementation solutions.

➢ **,etc.... Complements, TBA**

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Topics needed discussion

› Q2: For CSPs who've chosen "not sure or unable to share", what are their current difficulties? If we could know their difficulties, we might be able to suggest ONAP community(e.g. ONAP TSC) lower the evaluation threshold and help promote community's ecology.

› Q3:What is the difference between HUW and ONAP? Why choose ONAP based HUW instead of ONAP directly?

› Q5: EUAG should serve as a window for CSPs to observe industry trend, as well as communicate with each other and provide some effective suggestions for CSPs who have not yet decided to participate in a specific open source community.

› Q6:For the CSP who expressed a swing attitude between option B and C in comment, we recommend they describe the reasons for their hesitation and probably add these info to white paper as case sharing.

› Q9: What kind of workload is new , and what about existing workload? Can we describe them in whitepaper and give some examples in it? Difference between network element and workload?

› Q12-Q13: Hierarchical pattern is CSPs common requirement, EUAG group might need to specify this requirement, and probably let TSC provide related architecture and implementation solutions.

› ,etc.... **Complements, TBA**

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Thank you

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