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Ministry of Trade, Industry and Fisheries
P.O. Box 8090 Dep
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Norway

[Non-confidential version]*

Subject: Alternative pathway for electronic communications traffic

1 Summary

- (1) The EFTA Surveillance Authority (“the Authority”) wishes to inform Norway that, having assessed the planned support measure in favour of an alternative pathway for electronic communications traffic (“the measure”), it considers that the measure constitutes state aid within the meaning of Article 61(1) of the EEA Agreement. The Authority has decided not to raise objections to the measure,¹ as it is compatible with the functioning of the EEA Agreement, pursuant to Article 61(3)(c).
- (2) The Authority has based its decision on the following considerations.

2 Procedure

- (3) The Norwegian authorities notified the measure by letter of 15 August 2019.² Additional information was provided by e-mails on 16 August 2019 and 20 August 2019 and 28 August 2018.³

3 Description of the measure

3.1 Background

- (4) Norway is among Europe’s most digitalised countries, and robust electronic communications traffic is a critical component for the delivery of nearly all core services in the society. For example, the military communication lines used by the Norwegian Armed Forces as well as “Nødnett” (the emergency communication network used by the police, health institutions and fire services) are increasingly dependent on civilian networks.

* The information in square brackets is covered by the obligation of professional secrecy. Paragraphs 19, 26 and 73 have been amended to correct minor clerical errors.

¹ Reference is made to Article 4(3) of the Part II of Protocol 3 to the Agreement between the EFTA States on the Establishment of a Surveillance Authority and a Court of Justice.

² Document No 1083666 (“Notification”), Document No 1083662 (notification form) and Document No 1083660 (cover letter).

³ Document Nos 1084065 and 1085107.

- (5) Currently, most of Norway's international traffic is routed through a single geographical pathway going from Oslo, into Sweden and onwards to Copenhagen (the "Oslo – Sweden – Copenhagen route"). The Norwegian authorities consider this single connectivity a serious vulnerability, as discussed in a number of public documents.⁴ Under normal conditions, the land based infrastructure following the Oslo – Sweden – Copenhagen route has good capacity and high-speed traffic, which generally ensures quick resolution of network failures. However, the lack of geographical redundancy⁵ means a lack of adequate safeguards against major events, such as natural disasters and severe criminal acts, affecting this one route out of the country. According to the Norwegian authorities, the significance of this vulnerability must be assessed in the context of the increasingly uncertain security situation worldwide and the heightened risk of natural disasters due to climate change.
- (6) Due to the high level of digitalisation in Norway, a serious disruption on the Oslo – Sweden – Copenhagen route could lead to the simultaneous failure of many core services in Norwegian society, affecting the economy, public safety, civil protection and national security. In addition, the Oslo – Sweden – Copenhagen route consists of interconnections of several network segments from various cable owners, which entails an additional cyber-security risk compared to direct connections out of the country.
- (7) The planned measure aims at establishing a cyber-secure alternative geographical route in order to decrease the current national vulnerability in case of major adverse events affecting the operability of the Oslo – Sweden – Copenhagen route. In other words, the measure is not about coverage, access or connectivity as such, but about a certain form of redundancy – in the wider interest of Norwegian society and national security.

3.2 The market for international connectivity services

- (8) To access a digital service, the individual Norwegian user must connect to a provider of electronic communications networks, also called an internet service provider ("ISP"). Around 170 ISPs are currently present on the Norwegian market, some with national and others with regional or local span.
- (9) To make exchange of traffic between different ISP networks possible, the ISPs interconnect with each other at interconnection points called Internet eXchange Points ("IXPs"). The majority of national electronic communications traffic is currently exchanged at IXPs in Oslo.
- (10) The delivery of digital services is characterised by a high degree of dependency on functions, facilities or data outside of Norway. This is mainly due to the increasing use of cloud services and other international services, as well as the large amounts of content that can only be accessed by routing traffic abroad. The national ISPs therefore normally need to connect to network providers specialising in transiting traffic across national borders and continents ("international carriers")

⁴ See for example Meld. St. 38 (2016–2017), [IKT sikkerhet – Et felles ansvar](#), p. 39. Meld. St. 10 (2016–2017), [Risiko i et trygt samfunn – Samfunnssikkerhet](#), p. 70, Nkom report, [Robuste og sikre nasjonale transportnett – målbilder og sårbarhetsreduserende tiltak](#), p. 44.

⁵ Redundancy is (the inclusion of) components or mechanisms that are not strictly necessary for the functioning of an object, to account for failure on the other components or mechanisms.

in order to access and/or transmit this content.⁶ As nearly all domestic interconnections occur in Oslo, the vast majority of international connections also occur there (because it is the most affordable and practical option), before continuing through Sweden and Copenhagen. In other words, the lack of geographical regional redundancy in Norway stimulates the creation of the single corridor for transporting international traffic abroad. To illustrate the regional distribution, one can look at the interconnect traffic handled by the independent Norwegian Internet eXchange (“NIX”), where the Oslo IXP handled a yearly average of 63 Gbps of traffic, Trondheim 0.04 Gbps, Stavanger 0.002 Gbps and Tromsø 0.001 Gbps.⁷

- (11) Today, there is a handful of international carriers present at a few IXPs in Norway. The international carriers offer different international connectivity services⁸ to ISPs on a wholesale basis.
- (12) The national ISP’s choice of international carrier(s) depends on the ISP’s individual needs. It is normally based on the following considerations (in no order of importance):
 - i. **Security.** A national ISP spreading its international traffic through more than one provider of international connectivity services (“provider diversity”) will be able to maintain international connectivity if one of the providers experiences technical problems. Therefore, many large national ISPs choose to interconnect with more than one international carrier.
 - ii. **The geographical footprints of the networks.** For example, it is generally more convenient and less expensive to choose an international carrier that is present at an IXP where the ISP already interconnects domestically.
 - iii. **Types of international connectivity services offered by the international carriers.** Due to service differentiation (variation of products) between providers, an ISP may prefer one provider to another.
 - iv. **Latency.** Latency, i.e. the time it takes for data to travel between two points, can vary depending on a number of factors for example where the online service is produced, whether the provider is specialised in offering low latency products to certain locations, where the ISP connects domestically, etc.
 - v. **Price.**
- (13) Even though there are several international carriers offering diversified services, the Norwegian Communications Authority (“Nkom”) has conducted a number of studies and consultations⁹ showing a lack of geographical diversity in the market for international connectivity services. The consultation and mapping exercise shows that the vast majority of providers of wholesale services make use of a limited number of physical fibre cable systems that almost exclusively follow the Oslo – Sweden – Copenhagen route. Figure 1 below shows the network maps of

⁶ Some larger ISPs also have their own international networks.

⁷ Notification, Chapter 3.3.4, www.nix.no. The traffic volume distribution regionally is similar for interconnections between national ISPs.

⁸ Capacity products and IP transit.

⁹ Nkom report of December 2016, [Kartlegging og vurdering av infrastruktur som kan nyttiggjøres av datasentre](#), Nkom report of March 2017, [Nasjonal autonomi i norske elektroniske kommunikasjonsnett](#), Nkom report of April 2017, [Robuste og sikre nasjonale transportnett](#), Nkom report of 2017, [EkomROS](#).

a number of the largest providers of international connectivity services that are present in Norway, illustrating the lack of geographical diversity.

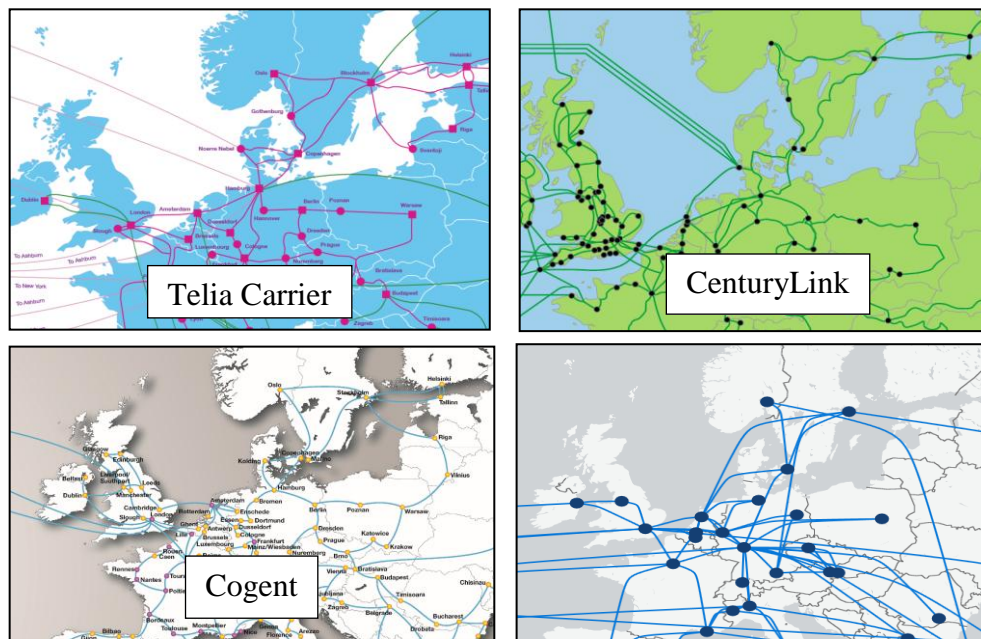


Figure 1. Network maps of a number of the largest providers of international connectivity services that are present in Norway.

- (14) Nkom has defined the desired level of security and robustness through a number of criteria. Only infrastructure fulfilling the security and robustness objectives of the state are considered relevant alternatives to the Oslo – Sweden – Copenhagen route (“secure alternative pathway”).
- (15) Alternative physical networks to the Oslo – Sweden – Copenhagen route do exist, most importantly Tampnet¹⁰ and Skagerrak.¹¹ According to the Norwegian authorities, these do not qualify as secure alternative pathways. This is particularly because the first is subject to additional external risks due to its integration with oil and gas installations, and because the latter is a bundled power/fibre cable system (both characteristics generally exclude compliance with the state’s defined security criteria described in Section 4.6 below). In addition, there are three physical fibre cable systems going from central and northern parts of Norway into Sweden, which subsequently interconnect with the Oslo – Sweden – Copenhagen network, as well as one fibre cable between the county of Finnmark and Finland.
- (16) The rollout of new international subsea fibre infrastructure entails high construction costs. The Norwegian authorities have estimated the total costs of an international subsea cable system in the target area at NOK 250–600 million (approximately EUR 25–60 million).¹² Stakeholders commercially interested in an investment of this sort are data centres, large digital service providers and other large companies requiring network capacity for transferring large data volumes. The financing of a new subsea fibre cable infrastructure could typically be carried out by a consortium. In those cases, the stakeholders would normally obtain

¹⁰ Subsea fibre cable system located in the North Sea branching out to the UK.

¹¹ Subsea fibre cable system integrated with the Skagerrak 4 power transmission system between southern Norway (Kristiansand) and Denmark (Tjele).

¹² The estimation is highly sensitive to the technical type and length of the cable system.

exclusive rights to a specific number of fibres within the subsea cable, which they make use of for their own purposes and independently of each other.

- (17) There are several initiatives to build new alternative cable systems from actors active in the data centre market.¹³ The Norwegian authorities have explained that even if some of these projects are realised, as the recent developments indicate, it is currently unlikely that anyone will acquire capacity on a new connection for the provision of international connectivity services on open and non-discriminatory terms, thereby establishing a secure alternative pathway for electronic communications.
- (18) As the market has moved closer towards realisation of the planned projects, the Norwegian authorities have been in continuous contact with market players to assess if there is still a need for state intervention. In the course of 2018/2019, the Norwegian authorities conducted a survey and interviews with twenty of the largest international carriers and national ISPs, asking if they had plans to provide international connectivity services on alternative connections, i.e. for example on the new cable infrastructures. The survey concluded that there was no commercial interest in or plans to provide further international connectivity outside Oslo, or construct/invest in alternative routes to/from Norway.¹⁴ [...] and Tampnet, have subsequently expressed that they are considering using parts of the capacity on their new planned build-outs to provide international connectivity services.¹⁵ The Norwegian authorities argue that it is nevertheless too uncertain whether these actors will provide international connectivity services on open and non-discriminatory terms in line with the public objectives, and particularly emphasise the importance of quickly alleviating the national security concerns at stake.

4 Objective of the measure

- (19) The objective of the measure is national security, i.e. to alleviate or at least substantially reduce the described vulnerability of Norway's international traffic in case of failure on the relevant infrastructures due to large-scale crises or other major, unexpected events. Furthermore, by providing a cyber-secure, largely uninterrupted subsea cable installation out of Norway, the measure also seeks to avoid the reliability and operational/maintenance problems typical for connections like the Oslo – Sweden – Copenhagen route, which are owned and operated by various cable owners.
- (20) To achieve the objectives of national security, the Norwegian authorities have explained that the new connection must serve not merely as a passive back-up system in case of failure on the Oslo – Sweden – Copenhagen route, but as a supplementary network actively used also in normal times. Appropriate traffic distribution is necessary in order to achieve sufficient capacity and effective redundancy in case of failure on the alternative network.
- (21) The Norwegian authorities will monitor whether an appropriate distribution level is met. It will be assessed on the basis of the following parameters:
- i. **General traffic distribution.** Nkom considers that if 15–30% of the estimated total international traffic is on the new alternative pathway, this

¹³ Map of all announced initiatives is available [here](#).

¹⁴ Notification, Chapter 3.3.4.

¹⁵ Tampnet's public announcement is available [here](#).

indicates sufficient utilisation. The traffic volume in this respect includes all types of traffic, both critical and non-critical. Therefore, the general traffic distribution is supplemented by the two next parameters when monitoring whether the security objectives of the measure are achieved.

- ii. **Degree of connectivity, i.e. to what extent ISPs connect to more than one network.** Traffic distribution in normal situations is not sufficient to determine the level of security and preparedness of the available infrastructure. If an ISP is connected to more than one international network, its traffic can be rerouted (either automatically or through a manual rerouting operation depending on the routing policy) to any operational route in case of failure on the other route(s), regardless of the traffic distribution in normal times. ISPs only connected to one route will experience failure of traffic. The Norwegian authorities therefore consider that a “critical mass” of large market players, i.e. market players representing 1/3 to 1/2 of the international connectivity market for internet users in Norway, must be connected to at least two alternative connections. Nkom will monitor the degree of connectivity through for example RIPE Atlas, a global openly distributed Internet measurement platform.¹⁶
- iii. **Organisation of essential national services.** It is not feasible to ensure that no critical international traffic is affected in case of large-scale failures. The objective of the notified measure is rather to reduce the negative impact of a breakdown on essential national services in particular. These are services that are critical for safeguarding the national security interest in accordance with the Norwegian Security Act.¹⁷ Providers of such services are required to document how these functions are preserved, and can be required to implement measures to ensure higher security (for example through a higher level of redundancy). The state can also supplement the measure in safeguarding the most critical functions in Norwegian society through their role as a purchaser, an area where there is currently a particular focus on security.

- (22) The objective is to achieve appropriate distribution within three years after the supported infrastructure becomes operational.

4.1 National legal basis

- (23) The legal bases for implementation of the measure are the tender documents and the final contract with the successful bidder. The decision to grant the aid is based on the State Budget for 2018, Decision 250/253 (Chapter 1380/Post 70), Prop. 1 S (2017–2018) and Innst. 13 S (2017–2018).

4.2 Aid granting authority

- (24) The granting authority is Nkom.

4.3 [...]

- (25) [...]

¹⁶ www.ripe.net.

¹⁷ Lov om nasjonal sikkerhet (sikkerhetsloven) [LOV-1998-03-20-10](http://lovdata.no/lov/1998-03-20-10).

4.4 Target area

- (26) The new international connection must run from Norway to a country with which Norway enjoys close security cooperation, such as a NATO allied country, through the Skagerrak Sea, North Sea or the Norwegian Sea, without intersecting Sweden and the Copenhagen area (“target area”).

4.5 Aid instrument, eligible costs and aid intensity

- (27) The aid instrument is a grant to the provider able to provide international connectivity services on open and non-discriminatory terms for a minimum of seven years via a physical fibre pair (or equivalent capacity) on a new secure alternative pathway (“the reserved fibre pair”).
- (28) Eligible costs are only investment costs related to the reserved fibre pair. The investment costs for the reserved fibre pair must be proportionate to the capacity reserved for international connectivity services and in line with what the other actors are paying. In all cases, the winning bidder will be required to keep separate accounts for the reserved fibre pair. No aid will be granted to cover the cost of operations, which have to be financed by commercial activities.
- (29) To demonstrate the need for aid, all participants in the tender will be required to present a net present value analysis (“NPV”) for the reserved fibre pair. It is a requirement that the NPV for the other fibre pairs is positive. A claw-back mechanism is included to prevent excessive profits on the subsidised fibre pair.
- (30) The maximum aid intensity is 100% (of the reserved fibre pair only). The actual aid intensity will depend on the outcome of the tendering procedure and the characteristics of the winning project.

4.6 Selection process

- (31) The aid beneficiary will be selected through an open, transparent and non-discriminatory public procurement procedure that aims to select the most economically advantageous offer, i.e. the offer with the best price-quality ratio in accordance with pre-defined criteria. The Norwegian authorities confirm that the procurement will be carried out in line with the Public Procurement Directive¹⁸ and national procurement rules.¹⁹
- (32) The bidders must comply with a number of qualification criteria, including:
- The new international subsea connection must be in the target area (see paragraph (26) above).
 - The geographical location of the connections termination points must enable onward routing of international traffic to major international IXPs, without intersecting Sweden and the Copenhagen area.
 - The subsea cable shall not be integrated with the international power transmission cables systems.

¹⁸ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement repealing Directive 2004/18/EC, [OJ L 94, 28.3.2014, p. 65](#).

¹⁹ Law on public procurement (*lov om offentlige anskaffelser*), [LOV-2017-04-21-18](#), Regulation on public procurement (*anskaffelsesforskriften*), [FOR-2016-08-12-974](#).

- The bidder must commit to providing international connectivity services on open and non-discriminatory terms for a period of at least seven years.
- (33) The bids fulfilling the qualification criteria will be weighed in line with the following pre-defined evaluation criteria:
- i. **Price (35%).**
 - ii. **Quality (30%).** Including state of the art technology, enabling variety of connectivity options with domestic and international networks, latency, capacity etc.
 - iii. **Security (20%).** Including the extent to which the physical path is geographically separate from the Oslo – Sweden – Copenhagen route, security of cable laying techniques, hereunder minimising of crossing of/dependency on offshore infrastructure in order to reduce the risk of cable breakage/tampering/eavesdropping and complexity of repair, and security of landing and termination points, etc.
 - iv. **Time of delivery (15%).** Including the robustness of the proposed time plan.
- (34) The bidders have the opportunity to suggest any possible technical solution that satisfies the requirement for diversity, robustness, security and operation as specified in the tender.

4.7 Wholesale access and pricing

- (35) The Norwegian authorities have explained that the design of the measure, i.e. the limitation to one fibre pair and the fact that it is on sea, technically and practically limits the products that it is possible and necessary to provide for ensuring effective wholesale access. The provider will be required to provide both access to the passive infrastructure (restricted to a specific spectrum on the reserved fibre, i.e. “part of a dark fibre”, and termination end-points, i.e. indoor cabinets) as well as active access (capacity products).
- (36) The access will be provided as early as technically possible. The Norwegian authorities have confirmed that the access obligations will be enforced irrespective of any change in ownership, management or operation of the subsidised infrastructure.
- (37) The minimum seven years requirement is set when balancing the wholesale access benefits with the need to facilitate a competitive tender and minimise the aid amount.
- (38) The provider will be required to grant wholesale access on “competitive market terms” which the Norwegian authorities define as prices that do not deviate considerably from the prices on the Oslo – Sweden – Copenhagen route.²⁰ The bidders will be required to document how the prices and terms comply with the “competitive market terms” criteria.
- (39) If considered necessary (for example upon complaint from a competitor), Nkom can assess if the prices on the new route deviate considerably from normal market terms, and it has the powers, pursuant to a clause in the agreement, to regulate the prices and other wholesale terms.

²⁰ Notification, footnote 48.

- (40) Generally, subsea cable systems have higher operating costs and require more complex cable repairs compared to terrestrial routes such as Oslo – Sweden – Copenhagen. If the provider, due to the aid, is nevertheless in a position to undercut prices of competitors, the regulator can use the price regulation powers in the agreement with the selected bidder.

4.8 Possible beneficiaries

- (41) The direct beneficiary is the winner of the tender procedure.
- (42) To the extent that the whole cable is financed through a consortium, the question arises if the other stakeholders who have reserved capacity for different purposes are beneficiaries of the measure. Due to the design of the measure whereby only investment costs related to the reserved fibre pair are eligible, the other stakeholders are not relieved from any costs that they would normally have to bear. As the investment costs will be shared proportionally, the other stakeholders also do not benefit from any enhanced security or technical features financed by public funds. Hence, they are not indirect beneficiaries.

5 Presence of state aid

- (43) Article 61(1) of the EEA Agreement reads as follows:
- “[...] any aid granted by EC Member States, EFTA States or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Contracting Parties, be incompatible with the functioning of this Agreement”
- (44) The qualification of a measure as aid within the meaning of this provision therefore requires the following cumulative conditions to be met: (i) the measure must be granted by the state or through State resources; (ii) it must confer an advantage on an undertaking; (iii) favour certain undertakings (selectivity); and (iv) threaten to distort competition and affect trade.

5.1 Presence of state resources

- (45) The funds to finance the new subsea infrastructure constitute state resources as they come from the state budget.

5.2 Undertaking

- (46) The state aid rules only apply if the beneficiaries of the measure are undertakings. Undertakings are entities engaged in economic activities, i.e. offering goods or services on a market.
- (47) The construction of a broadband network infrastructure with a view to its future commercial exploitation constitutes an economic activity.²¹ As the selected provider will exploit the subsea cable fibres commercially, it is an undertaking.

²¹ [The Authority's Guidelines on the notion of State aid as referred to in Article 61\(1\) of the EEA Agreement](#) (“NoA”) (OJ L 342, 21.12.2017, p. 35 and EEA Supplement No 82, 21.12.2017, p. 1), paragraphs 202 and 216, [the Authority's Guidelines on the application of the state aid rules in relation to rapid deployment of broadband networks](#) (“Broadband Guidelines”) (OJ L 135, 8.5.2014, p. 49 and EEA Supplement No 27, 8.5.2014, p. 1), paragraph 7.

5.3 Selective advantage

- (48) An advantage, within the meaning of Article 61(1) is any economic benefit, which an undertaking could not have obtained under normal market conditions, that is to say in the absence of state intervention. The advantage must be selective in that it favours “certain undertakings or the production of certain goods”.
- (49) State measures supporting the deployment of broadband networks are selective in that they target broadband investors only in certain segments of the overall electronic communications services market e.g. in particular in the provision of international connectivity services.²² The aid grant entails a positive economic advantage for the selected provider. While the use of a competitive selection procedure seeks to reduce the amount of financial support required, it does not eliminate the aid, as the public authority still provides a subsidy to the winning bidder.²³

5.4 Effect on trade and distortion of competition

- (50) The fact that a measure strengthens the position of an undertaking compared to other undertakings competing in intra-EEA trade is sufficient in order to conclude that the measure is liable to affect EEA trade.
- (51) The markets for electronic communications services are open to competition between operators and service providers that generally engage in activities that are subject to trade between the EEA States. The new route will be in competition with *inter alia* operators providing international connectivity services on the Oslo – Sweden – Copenhagen route, Tampnet and Skagerrak. By favouring the operator of the new route, the notified measure is liable to distort competition and affect trade.
- (52) Therefore, the Authority finds that the measure is liable to distort competition and affect trade between the EEA States.

5.5 Conclusion

- (53) In light of the above assessment, the Authority concludes that the notified measure constitutes state aid within the meaning of Article 61(1) of the EEA Agreement.

6 Procedural requirements

- (54) Pursuant to Article 1(3) of Part I of Protocol 3 to the Agreement between the EFTA States on the Establishment of a Surveillance Authority and a Court of Justice (“Protocol 3”): “The EFTA Surveillance Authority shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. (...) The State concerned shall not put its proposed measures into effect until the procedure has resulted in a final decision.”
- (55) The Norwegian authorities have submitted a notification of the aid measure and have not implemented it prior to the Authority’s approval. They have therefore complied with the obligations under Article 1(3) of Part I of Protocol 3.

²² The Broadband Guidelines, paragraph 13.

²³ The Broadband Guidelines, paragraph 8.

7 Compatibility of the aid measure

7.1 Applicability of the Broadband Guidelines

- (56) The Authority can declare state aid compatible with the functioning of the EEA Agreement under its Article 61(3)(c) provided that certain compatibility conditions are fulfilled.
- (57) The compatibility of aid for the rollout of broadband networks, for the purposes of securing coverage, access or connectivity, is normally assessed under the Broadband Guidelines.
- (58) The Broadband Guidelines' primary objective is ensuring widespread availability of broadband services to end users or access to higher speed internet. The problem targeted by the measure at hand is different as it concerns *redundancy* and the level of security and robustness of the international connectivity services that are already available to the end customers at high speeds – in a market currently characterised by overcapacity.²⁴ Exposure to this type of vulnerability is to a great extent geographically determined, and is probably relevant only for a handful of the Contracting Parties. The fact that Norway represents a “dead-end” in electronic communications traffic has undoubtedly contributed towards the channelling of all international traffic through the single, most practical terrestrial corridor.
- (59) The Broadband Guidelines do not specifically lay down compatibility conditions for measures targeting the specific security issues raised by the lack of geographical diversity and robustness of international connectivity services, which characterise the Norwegian market. Conditions such as the “step-change” requirement and the concern with benchmarking the upper limit of the wholesale prices while the most pressing concern with parallel infrastructure is actually the potential undercutting of prices, i.e. the lower limit, demonstrate that the Guidelines target different types of measures than the one under assessment. The need for intervention is also different as the Guidelines target situations where the market does not provide sufficient broadband coverage or the access conditions are not adequate.²⁵
- (60) The Authority considers that the Baltic Sea Cable infrastructure, assessed by the Commission directly under the Guidelines,²⁶ was more suited for direct application of the Guidelines as it specifically targeted the expected dramatic increase of traffic that could not be supported by the existing infrastructure (i.e. capacity concerns). Hence, the Baltic Sea Cable targeted (long-term) broadband availability specifically, although also bringing a number of security benefits comparable to the ones present in the case at hand.
- (61) Because the measure only and specifically targets the security issues raised by lack of geographic diversity (redundancy), it falls outside the scope of the Broadband Guidelines. Nevertheless, the Broadband Guidelines are the most detailed guidance available for assessing the compatibility with the EEA Agreement of state aid to broadband infrastructure projects. The Authority will therefore apply the principles of the Broadband Guidelines by analogy to the

²⁴ Notification, Chapter 3.3.5.

²⁵ The Broadband Guidelines, paragraphs 34–35. See also the pre-requisites for defining a service as an SGEI in paragraph 16.

²⁶ Commission Decision SA.36918 (Finland), *Baltic Sea Backbone Cable*, [OJ C 422, 8.12.2017, p.1](#).

extent that they are relevant when assessing the measure directly under the Agreement.

- (62) The Authority bases its compatibility assessment on the following common assessment principles:
- i. contribution to a well-defined objective of common interest;
 - ii. need for state intervention;
 - iii. appropriateness of state aid as a policy instrument;
 - iv. existence of an incentive effect;
 - v. proportionality of the aid amount (aid limited to minimum necessary);
 - vi. avoidance of undue negative effects on competition and trade; and
 - vii. transparency.

7.2 Objective of common interest

- (63) State aid must aim at a well-defined objective of common interest recognised by the Contracting Parties.
- (64) The overall objective of the measure at hand is to achieve the national targets for security and preparedness concerning Norway's international electronic communications by reducing the dependency on one single geographical path.
- (65) The EEA is becoming increasingly digitised and relies to an ever greater extent on the Internet. The Norwegian society is digitised to a very high degree. In an era of ever-greater cyber threats, dependency on only one geographical pathway creates a vulnerability that can ultimately affect core services in the society. Reducing and alleviating this vulnerability is an objective of common interest.
- (66) The Norwegian authorities have clearly defined how the objective can be achieved (through appropriate traffic distribution), the desired time frame (three years) and defined clear measurable parameters that will be continuously monitored by the Norwegian authorities.
- (67) Against this background, the Authority concludes that the measure targets a well-defined objective of common interest.

7.3 Need for state intervention

7.3.1 Introduction

- (68) In order to assess whether state aid is effective to achieve the identified objective of common interest, it is necessary to first diagnose the problem that needs to be addressed. State aid should be targeted towards situations where aid can bring a material improvement that the market alone cannot deliver, for example by remedying a well-defined market failure.
- (69) A number of studies and reports conducted by Nkom (see paragraph (13)) show that the Oslo – Sweden – Copenhagen route carries most of the international traffic, while remaining physical fibre cables carry only an unsubstantial part.

- (70) The Norwegian authorities have explained, as set out below, that the existing alternative routes, most notably Tampnet and Skagerrak, do not meet the minimum requirements for remedying the security and robustness concerns of the state. Furthermore, the Norwegian authorities argue that despite the on-going infrastructure initiatives it is unlikely that anyone will invest in them for the provision of international connectivity services. The Norwegian authorities further underline the particular time sensitivity for implementing the planned measure.
- (71) The Authority will assess the need for state intervention in light of these arguments.

7.3.2 Existing fibre cable systems are not secure alternative pathways

- (72) The mappings conducted by Nkom show that there are four physical fibre systems going from Norway to Sweden (see paragraph (14)). These are however not secure alternative pathways as they either interconnect with the same networks that constitute the Oslo – Sweden – Copenhagen route (i.e. they are not real alternatives), or they require international traffic to be routed through Finnmark (approximately 2000 km north of Oslo), which dramatically increases both network costs and latency. The latter is therefore neither economically nor practically viable as a real alternative to the Oslo – Sweden – Copenhagen route. Therefore, these four routes do not alleviate the security concerns of the state.
- (73) Currently, the main alternative provider of international connectivity services geographically separate from Oslo – Sweden – Copenhagen route is Tampnet, a subsea cable system branching from Norway to the UK. According to the Norwegian authorities, the existing infrastructure of Tampnet is not appropriate to achieve the public objectives. First, the system is subject to additional external risk factors such as oil spills, gas leaks or other major incidents due to its integration with the offshore oil and gas installations. Second, according to consultations with the industry, Tampnet is considered a more expensive product compared to the Oslo – Sweden – Copenhagen route. Hence, it is not suitable to provide the required level of traffic distribution. The Norwegian authorities seek to minimise this type of crossing/dependency on offshore infrastructure in order to reduce the risk of cable breakage/tampering/eavesdropping and the complexity of necessary repairs (see the tender requirements set out in paragraphs (32) and (33)). Therefore, the Authority considers that the existing Tampnet system does not fulfil the security targets defined by the state and is hence not a secure alternative pathway.
- (74) The other alternative network, Skagerrak, is a bundled power/fibre cable system between southern Norway and Denmark. Despite being geographically separate, the Skagerrak system does not respond to the public security objectives because such bundled systems can require more complex and costly repairs compared to stand-alone subsea systems, potentially leading to longer downtime in case of failure.²⁷ Such systems do not fulfil the minimum requirements as set out in the tender, and Skagerrak is therefore not a secure alternative pathway (see paragraphs (32) and (33)).

²⁷ See Nexia Management Consulting report of June 2015, *Statnett Submarine Fiber Evaluation – Evaluation of Additional Submarine Fibre Cable Projects to the NSN and NordLink HVDC Projects*, in particular Chapter 8.2.4. The report is available [here](#).

- (75) Based on this assessment, the Authority agrees that the existing fibre cables do not ensure the achievement of the objective of common interest.

7.3.3 Market failure despite the on-going infrastructure initiatives

- (76) Next, the Authority must assess if the new subsea cable build-out initiatives can achieve the objective of common interest without state intervention.
- (77) According to the information provided by the Norwegian authorities, new subsea cable initiatives in the Norwegian market appear to be triggered by the data centre industry. Their aim is to accommodate large global digital service providers such as Amazon, Apple, Facebook, Google and Microsoft. Customers such as these require a high level of connectivity and robustness. More specifically, they typically require at least three independent physical routes between their data centre locations. In other words, there is commercial interest for new secure alternative pathways in this market, and recent developments show that some of the new subsea cable initiatives are (or will soon be) ready for rollout.
- (78) Indeed, it was announced in March 2019 that one of the owners of the Havfrue system,²⁸ Bulk Infrastructure AS, had entered into an agreement with Amazon Web Services for the use of a significant proportion of the capacity on Havfrue, thereby triggering the rollout of this infrastructure.²⁹ [...] ³⁰ [...].
- (79) Even with the realisation of these (and potentially other) initiatives, the public objectives pursued by the measure can only be achieved if the relevant actors reserve capacity on the new networks for the purpose of offering international connectivity services to ISPs on open and non-discriminatory terms. In other words, a new pathway reserved for closed-off, data centre purposes will not alleviate the targeted vulnerability.
- (80) As confirmed by the survey and interviews in 2018/2019 (see paragraph (17)), there are currently few indications of concrete interest in investing in new subsea capacity for the provision international connectivity services.
- (81) [...]
- (82) According to specialist media reports, Tampnet is also currently expanding its North Sea subsea cable infrastructure, and has future plans for further expansion.³¹ According to Tampnet, the current build-out is primarily financed through activity in the oil and gas sector, but the company is also simultaneously positioning itself for the international connectivity market and the data centre market. To the Authority's knowledge, the Norwegian authorities have not been presented with any more concrete plans as to what this will entail in practice.
- (83) The Norwegian authorities have explained that the customers of the international carriers, i.e. the national ISPs, are less concerned with strong redundancy routing compared to the customers of the data centres. The general feedback in the

²⁸ New fibre cable initiative going from Kristiansand (Norway) through Blaabyerg (Denmark), Lecanvey (Ireland) and New Jersey (USA) across the North Sea/Atlantic Ocean.

²⁹ <https://www.dn.no/industri/peder-narbo/amazon/datasentre/-amazon-far-en-motorvei-rett-inn-pa-sorlandet/2-1-574556>.

³⁰ [...]

³¹ See Inside Telecom, 28 June 2019: Legger 68 fiberpar fra Egersund til Skottland <https://www.insidetelecom.no/artikler/legger-68-fiberpar-fra-egersund-til-skottland/468760>.

consultation rounds was that the national ISPs consider there to be sufficient capacity and competitive pricing along the Oslo – Sweden – Copenhagen route. This results in low demand for a new secure alternative pathway. Due to the insufficient demand, the 2018 survey (see paragraph (17)) revealed a corresponding lack of willingness among providers of international connectivity services to invest in capacity on the new cable networks. Due to the current lack of strong customer demand, these actors are in any event likely to have a lower ability and willingness to pay for the capacity on the new infrastructures compared to actors working with large, global service providers such as Amazon, Apple, Facebook, Google and Microsoft.

- (84) When assessing the pros and cons of investing in a new secure alternative pathway for the provision of international connectivity services, the general benefits of an alternative geographical route are not sufficiently taken into account by the providers of international connectivity services and their clients (the ISPs). This is because a private investment decision typically takes into account only the profitability of the project while neglecting benefits arising for third parties or on the overall market, if no one can be (sufficiently) charged for such benefits. The benefit for society of minimising the aggravated danger of a fall-out when all traffic is dependent on only one geographic pathway appears to be one such benefit.
- (85) The Norwegian authorities have not been presented with any concrete plans for investment, and they believe that there is no realistic prospect that the market will deliver an equivalent project to the planned measure without state intervention. Based on the available information, the Authority considers that it remains highly uncertain if anyone will invest in the provision of international connectivity services on a secure network on open and non-discriminatory terms. Keeping in mind this uncertainty and the general feedback from the industry suggesting lack of profitability and customer demand, there is a real risk that the capacity on the new projects will be sold for data centre purposes. Once the capacity on the new build-outs is sold, the window of opportunity to achieve the public objectives with limited funding (i.e. financing a fibre pair rather than a whole cable) will be closed. In light of the national security concerns at stake and the time sensitivity of the current market situation, the Authority acknowledges that the Norwegian authorities cannot await further developments from the commercial market players.
- (86) Against this background, the Authority takes the view that despite the new build-out initiatives a market failure exists for the sufficiently swift provision of international connectivity services on a secure alternative pathway.

7.4 Appropriateness of state aid

- (87) State aid must be an appropriate instrument to address the identified objective of common interest. An aid measure is not compatible with the functioning of the EEA Agreement if the same positive contribution to the common objective is achievable through other less distortive policy instruments or other less distortive types of aid.
- (88) *Ex ante* regulation in this sector is usually intended to establish conditions for a level playing field, provide regulatory certainty and enable shift intervention. The Norwegian authorities have explained that the actors that are involved in the new infrastructure initiatives, hereunder the large content providers, are not subject to the relevant regulatory competence of Nkom. Furthermore, before at least one

secure alternative pathway is in place, it is not appropriate to require that the national ISPs connect to more than one geographical path. Placing such a requirement on the ISPs, would only allow the existing providers to dictate less favourable terms for the ISPs and their customers, potentially placing them in a position to attain unjustifiably high profits. Against this background, regulatory intervention does not (at this stage) seem suitable for achieving the public objective.

- (89) The common interest also cannot be achieved through expropriation as achievement of the raised national security in case of unexpected events presupposes not only a mere back-up fibre, but the continuous provision of certain services and products on the new network.
- (90) The measure is designed in cooperation with Nkom, and the competitive procedure for selecting the direct aid beneficiary serves to minimise the aid. The authorities have given special attention to the design of the measure so that it is appropriate to achieve the objective, while avoiding undue negative effects.
- (91) The Norwegian authorities expect the reserved fibre pair to be utilised in line with the appropriate distribution targets within three years after it is ready for service. The upper limit of prices for the wholesale international connectivity services will be monitored, and prices are required not to deviate too much from the Oslo – Sweden – Copenhagen route. The Norwegian authorities have adopted this safeguard in order to ensure that the new route represents a real alternative, rather than a niche product, so that the target of appropriate distribution between several secure pathways can be achieved.
- (92) In the current market situation, the reserved fibre pair (which cannot intersect the Oslo region in order to be geographically separate) will be of interest mainly to ISPs that have infrastructure outside Oslo, and more specifically closest to the new landing points. For them, using the new infrastructure will be cost-effective, while ISPs that interconnect domestically in Oslo will incur an extra cost if they choose to interconnect internationally at a different location. As explained in paragraph (11) of this decision, nearly all ISPs currently interconnect domestically in the Oslo area.
- (93) According to an anticipated shift, however, providers of online services (governmental/regional local authorities' web services, national banking services, cloud services, social media providers, etc.) that are currently also located mainly in Oslo, will spread the production of services and products to other regions. There is a close relationship between the location of production of a service and the costs the national ISPs incur when transporting it. Therefore, the expected increase of data centre activity regionally – which will be additionally stimulated once the new-build outs ensure more redundant and secure connections – is expected to attract more ISPs to connect domestically (and internationally if available) at IXPs outside Oslo. In response to the new market dynamics and to further stimulate the shift, NIX has started an initiative to increase the domestic interconnections at regional IXPs. All of this is expected to incentivise the use of the new pathway.
- (94) The Norwegian authorities have committed to monitor the actual utilisation of the new connection and to consider implementing supplementary regulatory measures if the market nevertheless fails to deliver the desired traffic distribution

within the three-year target. Once secure alternative routes are in place, it is for example possible to require national ISPs to establish a certain level of geographic diversity for their international traffic. The Norwegian authorities have confirmed that they will initiate the necessary procedures with the aim of implementing sector regulation within the three-year period, if this is necessary in order to ensure that the objectives of the measure are achieved in due time.

- (95) On this basis, the Authority finds that the measure is an appropriate instrument to achieve the set objectives.

7.5 Incentive effect

- (96) State aid is only compatible with the functioning of the EEA Agreement if it has an incentive effect, i.e. when the aid induces the beneficiary to change its behaviour to further the identified objective of common interest, a change in behaviour that it would not undertake without the aid. The impact of the aid can be the realisation of a particular investment or its timing.
- (97) As discussed in more detail in the context of market failure, according to the results of the public consultations and other subsequent consultations with the industry, it seems that no market operator is currently investing, or concretely planning to invest in providing new international connectivity services on a secure alternative pathway. The aid is therefore targeted at changing the investment decision of the successful bidder.
- (98) In order to demonstrate the incentive effect in each individual case, the bidders will be required to submit a NPV analysis for the reserved fibre pair according to the following formula:
- $$NPV = [R1/(1+i)^1 + R2/(1+i)^2 + R3/(1+i)^3 + \dots] - \text{Initial investment cost}$$
- (99) In the formula, i is the discount rate; $R1$ is the net cash flow during the first period; $R2$ is the net cash flow during the second period; $R3$ is the net cash flow during the third period, and so on.
- (100) Most of the existing infrastructure is land-based and is not as such directly comparable from a technological perspective to a subsea fibre cable, which is constructed under other, more challenging conditions and entails a different level of risk. In lack of truly comparable projects, the Norwegian authorities consider it inappropriate to estimate the general risk and reward profile of a new subsea infrastructure by setting a general threshold for the required rate of return (or the discount rate) in advance.
- (101) Instead, the bidder's required rate of return will be benchmarked against what the undertaking usually requires for investment projects. This must be documented, for example with internal corporate policy guidelines or with reference to other similar investment projects. If the required rate of return in the tender deviates from the available benchmarks, the bidders are required to explain the difference, for example with reference to the risk associated with the project. The Norwegian authorities can reject bidders who submit insufficient documentation of their required rate of return.³² To the extent that the NPV analysis concludes that the

³² The Norwegian Procurement Regulation, [FOR-2016-08-12-974](#), Section 24-8(1)(b) and Section 24-8(2)(a).

investment has a negative NPV, the funding gap will be eligible for aid. Alternatively, if the bidder documents a more profitable counterfactual investment (for example through utilising the capacity for data centre purposes), the difference in rate of return is also eligible for aid. In this scenario, the aid is necessary for inducing the shift in investment.

- (102) The documentation requirements serve to prevent that bidders present a negative NPV analysis for projects that would be undertaken without aid, but where an abnormally high rate of return leads to a negative NPV or a funding gap for shift of investment. Based on the abovementioned documentation, the Norwegian authorities have committed to verify that the project would not have been realised without the aid.
- (103) It is possible to participate in the tender even if the rollout of the infrastructure has started. This does not entail that the aid has no incentive effect as long as the abovementioned analysis shows that the investment for the specific purpose of the state, i.e. the reserved fibre pair, would not be undertaken without state intervention.
- (104) On this basis, the Authority considers that the design of the measure ensures that the aid has an incentive effect.

7.6 Proportionality

7.6.1 Introduction

- (105) State aid is proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the identified objective of common interest.
- (106) In this case, the following safeguards are implemented in order to ensure that the measure does not go beyond what is necessary for achieving the identified need:
- i. Detailed mapping of the problem and close and continuous dialogue with the industry.
 - ii. The use of a competitive selection procedure to select the most economically advantageous offer.
 - iii. Limiting the financial aid to the reserved fibre pair.
 - iv. Passive and active wholesale access to the subsidised infrastructure.
 - v. Monitoring and claw-back mechanism to prevent excessive profits.
- (107) These factors are assessed in the following.

7.6.2 Detailed mapping of the problem and close and continuous dialogue with the industry

- (108) In a case like the present, where the market for international connectivity is characterised by overcapacity and high speeds, it is paramount that the public authorities ensure a detailed mapping of the need to intervene, i.e. identify the problem.
- (109) As explained in paragraphs (13) to (13)(17), the Norwegian authorities have conducted detailed mapping of the problem through consultations and information gathering in several stages. This has resulted in a number of reports and high-level documents that conclude that the situation is unsatisfactory from a security point of view. The Norwegian authorities have also been in continuous dialogue with the industry, closely monitoring the market developments. These efforts limit

the possibility of crowding out private investment and demonstrate the need for state intervention.

7.6.3 Competitive selection procedure

- (110) As in other projects to finance broadband networks, the selection procedure of an owner and operator of the new infrastructure must ensure a competitive selection process to choose the most economically advantageous offer.³³
- (111) By organising a competitive selection procedure (described in Section 4.64.7) in line with the principles of openness, competition and transparency as required by EEA and national law, the design of the measure reduces budgetary costs, minimises the potential aid involved and at the same time reduces the selective nature of the measure by allowing all interested parties to participate. The key criteria and the relative weighting are known in advance, thereby allowing for actual competition.
- (112) The chosen selection process furthermore complies with the criteria of technological neutrality by allowing all possible technical solutions that fulfil the security targets of the state to participate in the tender.
- (113) The objective of the measure, i.e. the building and utilisation of a new alternative pathway for international traffic, naturally limits the possibility to utilise existing infrastructure in the construction of the new network. As price is the most important selection criterion in the tender, the bidders nevertheless have an incentive to utilise existing infrastructure to the extent possible.
- (114) The Authority concludes that the described selection procedure can be expected to limit the negative effects of the measure and minimise the aid in line with the principles of the Broadband Guidelines.

7.6.4 Limiting the financial aid to the reserved fibre pair

- (115) As elaborated on in paragraphs (16) to (18), the new build-out initiatives are triggered by the needs of the data centre industry, which is willing to invest in new subsea infrastructure on normal commercial terms. To avoid interference in this market, the design of the measure (hereunder the required NPV analysis for the isolated fibre pair, the requirement to keep separate accounts, etc.) ensures that the aid only finances the reserved fibre pair for international connectivity services. The accounting separation will also make it possible for the Norwegian authorities to monitor and prevent excessive profits on the subsidised infrastructure through the claw-back mechanism.
- (116) Limiting the public support to the reserved fibre pair justifies the high aid intensity of up to 100%. Compared to a project that subsidises the whole cable, the design of the measure ensures that the aid is well targeted to the identified problem, the overall aid amount is reduced, and undue negative effects in separate markets are avoided. It is also relevant that the Broadband Guidelines do not exclude 100% aid intensity for broadband infrastructure projects. The actual aid intensity of the measure will depend on the outcome of the tender procedure, and the

³³ The Broadband Guidelines, paragraph 74 letter c (competitive selection process), letter d (most advantageous offer) and letter e (technological neutrality) are applied by analogy.

Norwegian authorities expect the aid intensity of the supported project to be much lower than 100%.

- (117) In light of the importance of the objective of common interest at stake in the present case and the restrictive design of the measure, the Authority considers that the potentially high aid intensity is justified.

7.6.5 Passive and active wholesale access to the subsidised infrastructure

- (118) Third parties' effective wholesale access to subsidised broadband infrastructure is an indispensable component of any state measure supporting broadband. As the beneficiary will be using state resources to deploy its network, it is appropriate and necessary that it provides effective wholesale access, thereby strengthening choice and competition by allowing other operators to compete (when the beneficiary is also present at the retail level).³⁴
- (119) According to the Norwegian authorities, the design of the measure, i.e. the limitation to one fibre pair and the fact that it is on sea, technically and practically limits the products that are possible and necessary to provide for ensuring effective wholesale access.
- (120) More specifically, as the measure is limited to the financing of one fibre pair only, it is not appropriate to require the operator to offer dark fibre. This is because dark fibre is a product where the network provider/cable system owner sells off an entire fibre pair through a lease agreement, which typically has a duration of 15–30 years (often equivalent to the expected lifetime of the cable system). Access to passive infrastructure where the subsea cable lands on-shore (landing shelters, manholes, etc.) and possible short stretches of terrestrial cable infrastructure to the nearest termination points (which may include ducts and cabinets) are not necessary to ensure effective access when the provider does not offer dark fibre. Third party operators will however be given passive access through wholesale access to a defined portion of available capacity which they can utilise by using their own network equipment (spectrum), and active access through capacity products. Passive access to the termination end-points (i.e. indoor cabinets) will enable third parties to effectively utilise these products through the whole seven-year period.
- (121) Therefore, the Authority considers that the requirements ensure effective access, taking into account the practical and technological limitations of the subsidised infrastructure.
- (122) The measure requires that access is granted as soon as technically possible and for a period of minimum seven years in line with the requirement in the Guidelines.³⁵ When setting this minimum period, the Authority agrees that it is appropriate to balance the wholesale access benefits with the need to design a tender that is of interest to the market so that the aid amount can be minimised.
- (123) The Authority views as positive that Nkom is involved in the design of the wholesale access conditions. The contract with the beneficiary will include a clause providing Nkom with the powers to regulate wholesale prices and other wholesale terms if they deviate considerably from ordinary market terms. The

³⁴ The Broadband Guidelines, paragraph 74 g is applied by analogy.

³⁵ *Ibid.*

power to regulate will be used when necessary, for example subject to a complaint from a competitor. The decision of whether to regulate the wholesale terms and conditions will be based on unbiased administrative discretion taking into account all relevant aspects, hereunder pricing policies, access policies, services/products offered, latency, geographical target areas, network footprints and interconnection points.

- (124) Based on the above, the project ensures effective wholesale access in the sense of the Broadband Guidelines.

7.6.6 Monitoring and claw-back mechanism to prevent excessive profits

- (125) Future costs and revenue developments are uncertain. A balanced sharing of unanticipated gains through a claw-back mechanism ensures that the selected bidder does not benefit from overcompensation, and will minimise the amount of aid retroactively.³⁶
- (126) In this case, the successful bidder will have to submit annual financial reports to facilitate the follow-up of their rate of return on the reserved fibre pair. The measure includes a claw-back mechanism that will prevent the selected bidder from making excessive profits on the subsidised infrastructure. If the actual rate of return exceeds the required rate of return set out in the bidder's NPV calculation(s), the claw-back mechanism will come into effect.
- (127) The claw-back mechanism and the documentation requirements applicable to the required rate of return serve to increase transparency and indirectly deter the selected bidder from submitting a bid with an unreasonable required rate of return.
- (128) The Norwegian authorities have designed a claw-back mechanism based on a profit-sharing model. In line with best practice examples, profits will be shared according to the aid intensity of the measure.³⁷ By way of example, if 20% of the investment costs are financed through state aid, 20% of any profits above the required rate of return will be repaid to the state. The claw-back mechanism will be limited upwards to the total amount of public funding provided. In case the market develops more favourably than expected, this model provides for continued efficiency incentives. Adopting a hard threshold, on the other hand, would incentivise the provider to restrict its activities, so that the rate of return remains just below their required rate of return.
- (129) The claw-back mechanism adopts a multiannual approach, whereby the level of return is assessed for the seven years the selected provider is required to provide wholesale international connectivity access. This is because the rate of return might vary significantly from one year to another. The Authority considers that it is appropriate to look at the overall rate of return for the whole period the provider has special wholesale obligations.
- (130) By establishing this claw-back mechanism, the Norwegian authorities ensure that the recipient of aid will not benefit from overcompensation and aid is kept to the minimum.

³⁶ The Broadband Guidelines, paragraph 74 i is applied by analogy.

³⁷ The Broadband Guidelines, footnote 110.

7.7 Avoidance of undue negative effects on competition and trade

- (131) For state aid to be compatible with the functioning of the EEA Agreement, the negative effects of the aid measure in terms of distortions of competition and impact on trade between Contracting Parties must be limited and outweighed by the positive effects in terms of contribution to the objective of common interest.
- (132) The measure under assessment has been carefully designed to ensure that the overall balance of the effects of the measure is positive.
- (133) Its design, whereby only the costs for the reserved fibre pair are eligible, largely limits the direct negative effects of the measure.
- (134) At the same time, the core objective of the measure, i.e. creating an appropriate traffic distribution between at least two secure alternative pathways, presupposes certain negative effects on the existing infrastructures that currently offer wholesale access, i.e. in particular the Oslo – Sweden – Copenhagen route, Tampnet and Skagerrak. A degree of competitive friction with the existing cable systems and substitution is therefore both unavoidable and necessary for achieving the objective.
- (135) That said, the new infrastructure is expected to be mainly complementary to the existing infrastructures. Due to the concentration of domestic interconnection between ISPs at IXPs in Oslo, many ISPs will incur additional costs if they move their traffic to interconnection outside Oslo (i.e. to the new network). Switching will therefore not be cost-effective for many ISPs, even supposing that the services on the new route are offered at “competitive terms” to the Oslo – Sweden – Copenhagen route. This suggests that actual substitution will be relatively limited. Instead, the new infrastructure is expected to mainly take on supplementary traffic. To prevent unforeseen undercutting of prices by the selected provider and undue negative effects on competition with other networks, the Norwegian authorities have a number of regulatory powers available. They can for example regulate the wholesale prices of the beneficiary or require a higher level of geographical redundancy from the ISPs.
- (136) As the negative effects are expected to be limited and are to some extent unavoidable for achieving the objective of common interest, which is of great importance and urgency, the Authority finds that the Norwegian authorities have designed the measure in such a way as to minimise the state aid involved, the potential distortion of competition and the impact on trade arising from the measure.

7.8 Transparency

- (137) Transparency of aid for broadband infrastructure has a dual purpose. As pointed out by the Broadband Guidelines, these requirements ensure that third party operators can easily ascertain the possibility to access such infrastructure.³⁸ Second, the requirement to publish information about large aid amounts in the national transparency register promotes accountability. The Authority considers that these requirements must be complied with also in the present case.³⁹

³⁸ The Broadband Guidelines, paragraph 74 j.

³⁹ *Ibid.*

- (138) The Norwegian authorities have confirmed that they will publish the full text of the aid measure and make all necessary disclosures on a central website, including the full text of the approved measure, its implementing provisions, the name of the selected provider, aid amount, aid intensity and the technology used. The information will be available to the public for at least 10 years without restriction.
- (139) The Norwegian authorities have further confirmed that the aid award, should it exceed EUR 500 000, will be published in the national transparency register.
- (140) Therefore, the measure fulfils the transparency requirements.

8 Conclusion

- (141) Based on the foregoing assessment, the Authority considers that the notified measure constitutes state aid with the meaning of Article 61(1) of the EEA Agreement. Since the Authority has no doubts that this aid is compatible with the functioning of the EEA Agreement pursuant to its Article 61(3)(c), it has no objections to the implementation of the measure.
- (142) If this letter contains confidential information which should not be disclosed to third parties, please inform the Authority **by 10 October 2019**, identifying the confidential elements and the reasons why the information is considered to be confidential. In doing so, please consult the Authority's Guidelines on Professional Secrecy in State Aid Decisions.⁴⁰ If the Authority does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter on the Authority's website: <http://www.eftasurv.int/state-aid/state-aid-register/>.

For the EFTA Surveillance Authority, acting under [Delegation Decision No 068/17/COL](#),

Yours faithfully,

Bente Angell-Hansen
President
Responsible College Member

For Carsten Zatschler
Countersigning as Director,
Legal and Executive Affairs

[Status]

⁴⁰ [OJ L 154, 8.6.2006, p. 27](#) and EEA Supplement No 29, 8.6.2006, p. 1.