



# Sundahöfn Development Reassessment

Towards optimised logistics  
for the Icelandic market

Final Report

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## About Portwise

Portwise was founded in 1996 as part of TBA Group and has been independent since 2022. Over the years, we have become a world-leading consultancy and simulation firm for logistics in ports, terminals and warehouses. Portwise uses models, tooling, and expertise, to design smarter, more efficient and more sustainable ports and terminals for future-proof logistics around the world. We bring more than two decades of expertise from over 1,000 consultancy projects since 1996.

Portwise has worked on over 1000 projects, including the design and improvement of over 200 terminals in over 85 countries spanning six continents, ranging from 50,000 TEU to 10 million TEU in annual throughput, for customers from small local operators to major global operators.

Our studies have included all handling equipment available on the market, from manual to the most innovative terminal design and automation projects globally over the last 25 years, and new innovative container handling technologies and concepts. Portwise performs studies for detailed conceptual planning for terminal layouts, handling systems, quay crane concepts, transport and yard systems, truck gates, operating strategies, TOS evaluations, rail/intermodal operation, and many others.

Project experience includes key port development projects in Europe (e.g., Antwerp, London and Rotterdam, etc.), the Middle East (e.g., Jebel Ali terminals and Khalifa terminal, etc.), North America (e.g., innovative developments in the ports of Los Angeles / Long Beach, New York/New Jersey and Virginia, etc.), South America, Asia (e.g., Shanghai, Qingdao, Tianjin, Singapore, etc.), and port development in Oceania (Sydney, Brisbane and Melbourne etc.).

We work for almost all the major global terminal operators, and many regional / local terminal operators on hundreds of projects in the past, including PSA, Hutchison, APM Terminals, DP World, HHLA, MSC, TIL, CMA, Terminal Link, COSCO, Ports America, Global, China Merchant, Hanjing, Eurogate, Contship, SIPG, NEOM, Patrick, Santos Brasil, Yilport, Libra Brasil, Adani, ICTSI, SAAM, Transnet, and many others. Besides, we also work for many inland facilities and intermodal terminal operators.

Portwise's team consists of a highly motivated and highly educated workforce of approximately 25 planners, engineers, consultants and operational experts. They work from our head office in Rijswijk – The Netherlands, with representation in North America, South America and Oceania/Asia.



## Executive summary

Faxaport is a Port Authority in Reykjavik and operates a landlord model and manages, among others, Sundahöfn. Sundahöfn handles mostly container transport, divided over two terminals: Eimskip and Samskip. Both are shipping lines operating a highly integrated model. For the future development of Sundahöfn, Faxaport engaged with Drewry in Y2021~Y2022 for an evaluation of various development options. The main objectives of the Port Authority are to ensure optimal competitiveness and efficiency of container terminal operations at Sundahöfn and responsible use of public funds and land and value for money for the local communities and shareholders of Faxaport. The evaluated alternatives included the current model with two separate terminals, an alternative with a common berth and separate yards, a common user terminal, and a combination of a dedicated terminal for Eimskip and a common user terminal at Vogabakki. Out of these, Drewry concluded that a common user terminal, with a third-party terminal operator, is the best option.

Eimskip has asked Portwise to review the document by Drewry and reassess the proposed options. Extending Drewry's study, Portwise has conducted a further assessment whether or not a common user terminal operated by a third party indeed best suits the long-term goals of Faxaport and overall Icelandic interests.

Portwise's evaluation includes a direct detailed review of the alternatives proposed, as well as the criteria and scoring conducted by Drewry. An alternative assessment is conducted, using a theoretically more appropriate 10-point scale scoring method in a robust unweighted and weighted manner. Portwise has used broadened criteria with added criteria that were overlooked in Drewry's evaluation, but that are very relevant and important to the goals of Faxaport and the long-term development of Sundahöfn.

Throughout the entire assessment, Portwise maintained an independent and objective perspective, focusing on the identified long-term development objectives. Perspectives from Portwise's own expertise and experience in terminal development, combined with insights obtained from interviews with industrial experts and reference sites are brought into the consideration and recommendations of what will best serve Faxaport and Iceland for the future development of Sundahöfn.

In summary, in the view of Portwise, the recommended option by Drewry for Faxaport – i.e. a common user terminal, with a third-party terminal operator – is not the one that serves the goals of Faxaport in the best way possible. This “controlled monopoly” is expected to lead to:

- Worse service levels to the Icelandic importers and exports
- Less competitive overall supply chain to and from Iceland
- Higher cost to the consumers in the long run



Portwise considers the current duopoly model with two dedicated terminals, including the proposed plan for densification and electrification the most preferred option from the viewpoint of Faxaport's goals.

Portwise is also of the opinion that current operations are quite efficient when considering scale and the type of equipment used. The degree of integration between the landside supply chain, terminal and warehouse operations and shipping lines are to be considered best-practice from an international point of view. This facilitates short lead times to the market for time-critical cargo, efficiency in logistics chains for both exports and imports, and flexibility under regularly challenging conditions (storms, snow, schedule changes). It is highly unlikely that such flexibility and resilience will come about with a 3<sup>rd</sup> party operator in the middle of this already optimised supply chain.

Moreover, we do not consider the cost of the supply chain to and from Iceland high. If we compare rates to those of other European ports, which are even operating in more competitive markets (e.g. the Le Havre – Hamburg range). Therefore, the expectation that the costs would come down significantly with the entry of a 3<sup>rd</sup> party operator, is in our view *unrealistic*.

In order to encourage long-term investments by the two operators, longer concessions for the berth are recommended, as certainty is key in making commitments into yard densification and electrification.

Finally, the current port capacity is already far beyond demand. Immediate expansions of berth or yard are not required, especially not when dwell times are reduced, which should be possible. In the long term, the development of the quay side and land area between the two terminals will provide the additional capacity.



# 1. Introduction

This report presents Portwise's response to Drewry's study conducted in Y2021~Y2022 for the future development of Sundahöfn. In this study engaged by Faxaport, Drewry evaluated various development options, including Faxaport's initial plan, Eimskip's plan, and alternatives proposed by Drewry. Amongst these options, Drewry concluded that a common user terminal with a third-party terminal operator, is the best. Upon the final report published by Drewry and Faxaport<sup>1</sup>, Portwise has made a detailed assessment on the study approach and check whether the most important recommendations are correct. This report is a response to the Drewry report and will examine whether or not a common user terminal operated by a third party indeed best suits the long-term goals of Faxaport and the best interest of Iceland.

## 1.1 Background

Although Iceland is relatively small in terms of country size and population, the economy is steadily growing, mainly because of e.g. the increasing tourism and the availability of valuable natural resources. The Icelandic economy is strongly export-driven, with Europe, Canada, the US and the UK as its most important trading partners. Exports include fish and metals, while imports consist other raw materials and consumer goods. Iceland's capital Reykjavik not only houses 65% of all Icelandic people, it also handles the vast majority of imports and exports.

Faxaport is Port Authority in Reykjavik and three other municipalities on the West coast of Iceland. It operates a landlord model and manages five Icelandic harbours, including Sundahöfn. Sundahöfn is a multi-purpose port, but mostly handles container transport, roughly 400,000~500,000 TEU in total. This volume is divided over two terminals: Eimskip and Samskip. Both are shipping lines operating a highly integrated model.

Eimskip is the largest container operator from and to Iceland. It operates Kleppsbakki and Sundabakki in Sundahöfn, where its homebase is located. Directly within the terminal's perimeter, several cold storage facilities are located. Its neighbouring competitor Samskip operates Vogabakki. In the near future, it is anticipated that a new bridge will be constructed that crosses Vogabakki. Large vessel cannot pass underneath this bridge.

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<sup>1</sup> Published via: [https://www.faxafloahafnir.is/wp-content/uploads/2022/10/Sundahofn-Container-Terminal-Development-Options-Assessment\\_Final.pdf](https://www.faxafloahafnir.is/wp-content/uploads/2022/10/Sundahofn-Container-Terminal-Development-Options-Assessment_Final.pdf)



## 1.2 Drewry’s assessment of development options: summary

To support in identifying the optimal development for future development of Sundahöfn, Faxaport has engaged Drewry (Y2021~2022) to evaluate various development options. The underlying objectives of the assessment are to ensure optimum competitiveness and efficiency of container terminals operations at Sundahöfn and responsible use of public funds and land and value for money for the local communities and shareholders of Faxaport. In the evaluation, Drewry has conducted studies including a market overview and outlook, a review of current container operations, an assessment of future needs, and an assessment of various development alternatives and institutional structure option.

Being the focus of Portwise’s assessment, Drewry has reviewed total 6 alternatives with additional variations of institutional structural options under the alternatives, including:

- Previous schemes:
  - Faxaport’s future development
  - Eimskip future master planning
- Alternatives developed by Drewry:
  - Alternative 1: separate terminals (Eimskip and Samskip), as in the current model.
  - Alternative 2: integrated terminal for berthing, separate stacking (Eimskip and Samskip), with structural options of “integrated port authority and operator” or “landlord port authority in JV with stevedore as terminal operator”.
  - Alternative 3a: common user terminal, with structural options of “integrated port authority and operator”, or “landlord port authority in JV with stevedore as terminal operator”, or “third party terminal operator with concession”.
  - Alternative 3b: Vogabakki common user with third party terminal operator with concession + Sundabakki and Kleppsbakki (Eimskip).

Overall quay and land use development and investment plans for these alternatives were proposed. The attractiveness and feasibility of each development option, together with the associated structural variations, were assessed with unweighted scoring of selected criteria. An additional assessment on capacity, operations, and capital expenditure was also conducted. An overview of Drewry’s conclusions is summarised as below:

- Operationally, a common user terminal (alt. 3a) was concluded the best alternative.
- The existing model with two dedicated terminals (alt. 1), and a dedicated terminal for Eimskip alongside a common user terminal at Vogabakki (alt. 3b) were concluded operationally the next best thing.
- A common berth with separate yards (alt. 2), and a dedicated terminal for Eimskip and a common user terminal at Vogabakki (alt. 3b) were concluded most attractive in terms of CAPEX projection for a high-case volume growth scenario.
- The common user options (alts 3a & 3b) were concluded the most attractive institutional structures.





- The existing operation (alt. 1) and a dedicated terminal for Eimskip alongside a common user terminal at Vogabakki (alt. 3b) were concluded with the most feasible structures.

Overall, Drewry concluded that a common user terminal (alt. 3a) with a third party terminal operator is the best option with the best operational flexibility for a modest additional cost. Should this not be feasible due to land leases, the combination of a dedicated terminal for Eimskip alongside a common user terminal at Vogabakki (alt.3b) was concluded as a fall back option that would provide operational flexibility and an attractive structure.

### **1.3 Outline of Portwise’s report**

Upon the alternatives assessed and the conclusions made by Drewry, Portwise will address and present Portwise’s assessment and conclusions in detail in the remainder of the report:

- Chapter 2 presents Portwise’s review of the assessment by Drewry, including the alternatives, criteria, scoring, and additional remarks on items such as capacity, operation, and development.
- Chapter 3 presents Portwise’s assessment of the option with it alternative approach.
- Chapter 4 summarises the key conclusions and recommendations from Portwise’s assessment.

## 2. Review of the assessment by Drewry

The review of the assessment by Drewry will be done in three steps:

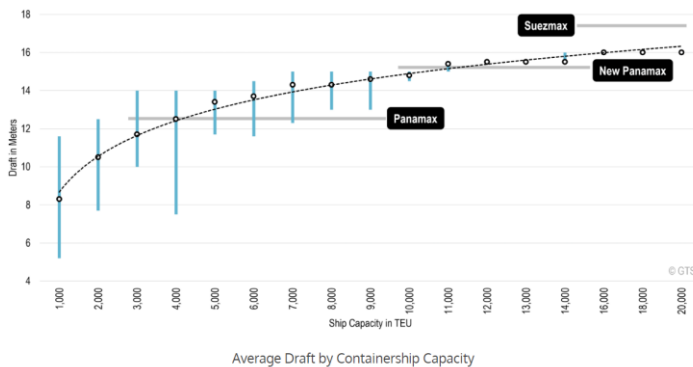
1. Review of the development options provided by Drewry
2. Review of the criteria, given the objectives formulated by Faxaport
3. Review of the scoring and scoring method; here we will focus on the scoring between the option proposed by Drewry (3a) and the current model.

### 2.1 Review of development alternatives (all 6)

The main objective for the assessment of development options (Drewry report p.5) is “to ensure optimum competitiveness / efficiency of container terminal operations and responsible use of public funds / land and value for money for the local communities / shareholders of Faxaport”. In our view, this is a good starting point for a Port Authority when assessing long term port development.

Sundahöfn is the gateway into Iceland, and also from Iceland towards the main trading partners. It is operated by two competing operators (Samskip and Eimskip), which both operate a highly integrated supply chain model (shipping, forwarding, terminal and trucking). The scale of the operation is relatively small yet with high frequency, driven by short connection times for export to the destination markets.

Drewry expects that an increase in volume is only possible with an increasing ship size, and mentions here a LOA of 280m and a draft up to 13.4m (est. capacity 5,000 TEU). Currently, there is only one quay that can handle such ships. Since today’s vessels do not exceed a LOA of 180m and a draft of 11m (approx. 2,000 TEU capacity), the project step forward is quite large, if not excessive. Certainly, Sundabakki seems to cater for mid-term growth of vessels (up to 4,000 TEU, which means doubling today’s largest vessels), in terms of quay wall and quay crane capabilities.



Source: Adapted from Clarkson Research.

Figure 1: Vessel draft versus vessel capacity

Due to peaking in the vessel schedule, Drewry (p.8) expects the need to increase the length of the Sundabakki quay to 600m by 2040. We concur with this assessment, when looking at the projected volume growth. The higher demands for quay length (e.g. extend up to 1,200m in total as shown in the original long-term development plan), we deem unlikely, at least in the coming 20 years, as per industrial benchmarks of what volume capacity can possibly supported as per industrial benchmark for the expected vessel mix for future calling) . There is plenty of room for optimisation, which is quite well feasible due to the integrated operations of liner business and terminal business. Also, the fact that berth occupancy is artificially high due to the lay by operation (no vessel operation), gives further room for increased throughput.

With quay crane (QC) productivities in the range of 20 – 25 bx/h, this would already give the quay of Sundabakki a capacity of more than 500,000 TEU (assuming 3 STS at 4,500 – 5,000 operating hours / year). Although this productivity estimate exceeds what Drewry reports (p.32), these average productivities (16 bx/h) include large lay-by times over the weekend, which is against market requirements. The current market requires berthing days and operation over weekdays, with limited preference for weekend berthing and operations. This background should be underlined in case of for example any fair cross-comparison is to be made.

The capacity of the Kleppsbakki and Vogabakki quays is lower, but in total we consider 1 million TEU feasible (250,000 TEU for Kleppsbakki and Vogabakki each). Based on the Drewry projections, this would provide sufficient capacity beyond 2050 (even in the high case) without investments in the quay wall, only in quay equipment (either STS (Sundabakki) or MHC (other quays)).

Also, both operators (as well as their 3<sup>rd</sup> party liner customers) have control over the choice of vessels deployed. With speed over minimum cost, the choice for smaller vessels (considering the low volumes) is more likely than vessels beyond 4,000 TEU.

Drewry has assessed 6 alternatives, which we will individually discuss in the next sections. Evaluation criteria will be discussed in section 2.2. Scoring will be discussed in section 2.3.

### **2.1.1 Alternative 0 “Faxaport”**

The Faxaport plan foresees in large berth extensions, as well as a major landfill and terminal yard development behind the extended Vogabakki quay (see Figure 2). In Portwise’s view, it is a logical further development of Sundahöfn, albeit developments far beyond the mid-term needs. The two quay extensions will provide an overall quay wall of close to 2,300m across the 3 quays, only restricted by draft. The development area behind Vogabakki and Sundabakki (see Figure 3) is about 57 hectares. In view of future volume growth, yard densifications, dwell time optimisation, etc. can be effectively implemented to increase yard capacity without need for substantial land and yard area expansions. The area – when properly densified *and* with dwell times optimisation – could yield a capacity between 1.5 and 2.0M TEU (not considering the closing of half the Kleppsbakki basin), based on estimation considered based on typical industrial benchmarks and Portwise’s decades design experience. Therefore, closing half the Kleppsbakki basin could be well planned as a final step to create further

capacity of Sundahöfn. From yard storage capacity perspective, closing half the Kleppsbakki basin would be recommended to consider beyond 1.5MTEU only (note that Portwise does not consider whether there is any need to closing half the Kleppsbakki for other possible reasons e.g., need for extra logistics activities).

In this development plan, we see plenty of opportunity to meet the goals of Faxaport, in the sense of developing a competitive efficient container terminal operation. With the right planning in time of the extensions of quays (and certainly of the landfill), it will also provide the desired returns to the community and stakeholders in Faxaport.

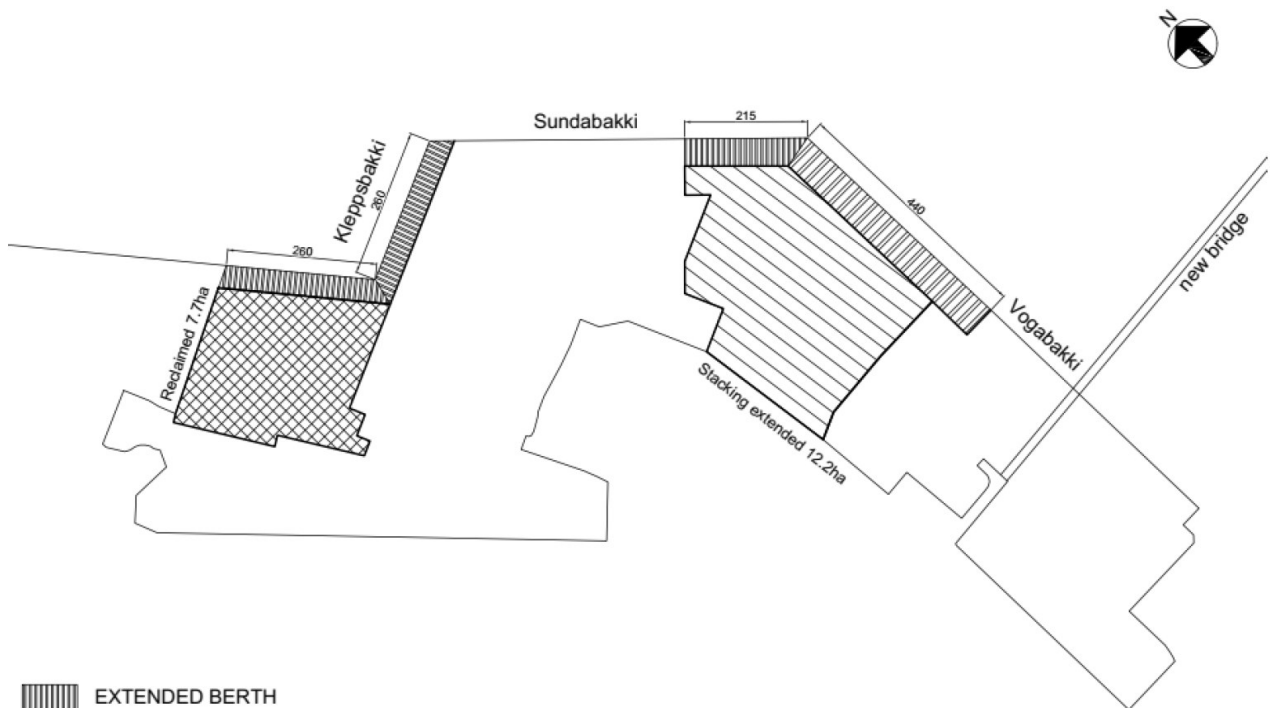


Figure 2: Alternative 0, Faxaport plan (source: Drewry report p.51)

### 2.1.2 Alternative 0 “Eimskip”

The alternative that Eimskip proposes in its masterplan aligns well with the base plan of Faxaport. Although (obviously) focussed on Eimskip only, there are no contradictions, apart from Eimskip not seeing the need for the landfill within the horizon of their master plan. Densification and electrification though, are part of the masterplan, which aligns again very well with the goals of Faxaport. As mentioned before, this plan provides more than enough quay capacity for the coming decades, which means there is also room for new entrants. Eimskip is already accommodating Royal Artic on its terminal, but there is more than enough space for others.

**2.1.3 Alternative 1 “extended 2 terminal solution”**

Alternative 1 as proposed by Drewry is a continuation of the current 2 terminal set-up, executing the Faxaport masterplan. In our view, a plan which enables long term capacity, competitive conditions, and with the right master plan timing also optimum returns to the Faxaport shareholders. With the right conditions for terminal concession management, the negative impacts of port operations can be mitigated (e.g. through electrification of all equipment).



Figure 3: Overview of Sundahöfn with berth expansions of Sundabakki and Vogabakki as well as the land area behind

**2.1.4 Alternative 2 “common user terminal with separate yards”**

Alternative 2 as proposed by Drewry is a model that is – to our knowledge – only seen in some terminals on the US East coast, where vessel operation and yard operation are separated (examples are Baltimore, Charleston, and Savannah). This type of operation has historical reasons, from times when yard operations did not exist, but the stevedore (operation the vessel) directly delivered the cargo to train and road truck. This resulted in (unionised) operators only focussed on this type of operation. Nowadays, we consider this rather disintegrated, and therefore less efficient than vessel, yard and gate operations in one hand.

The one common berth will not be as effective as claimed. The (export) cargo will still reside in one piece of the yard. So berth flexibility (also because of draft restrictions) will be fairly limited.

Seeing this alternative in the light of Faxaport’s goals, it adds no value over alternative 1 (or 0), while creating complications in the connection between vessel and yard operations.





### **2.1.5 Alternative 3a “integrated common user terminal”**

Alternative 3a as proposed by Drewry is seen as the only way to be able to handle the vessel sizes as expected (by Drewry) by 2050 (280m by >13.4m draft). We do not concur with this assessment. In all other alternatives, this could also be realised. With a common interest between terminal operator and shipping line, the alignment between quay and vessel size is more likely to happen as opposed to when there is one integrated terminal.

There is one argument speaking for alternative 3 (integrated terminal): the volume up to 2050 remains fairly low in international context in the current model. However, we consider the volume sufficient to have two operators (not 3, for that the volume is too low).

One integrated terminal reduces in our view the competitive landscape dramatically. A monopolistic situation will by default lead to an operator who will aim to maximise its profits without the fear for customer’s churn. Concession agreement conditions and strong regulation by competition authorities (like realised in Oslo), will typically attempt to keep this under control, but it is foreseen more than likely to become a constant fight between the operator and the port authority.

The case in Oslo (where integration into one terminal took place) has led to an operator trying to squeeze revenues out of the terminal, whilst being constantly under scrutiny of the competition authorities. From a terminal operator point of view, this is an undesirable situation from which many would walk away.

Other cases (e.g. Luanda, Angola) where a less controlled monopoly evolved have led to excessive profits on behalf of the terminal operator, whilst delivering mediocre to bad service.

Besides this, a 3<sup>rd</sup> party operator is unlikely to be able to offer the integrated services which Eimskip and Samskip offer. This high level of integration leads to flexibility towards cargo owners, shorter time to the (international) markets, and hence overall benefit to Faxaport’s stakeholders.

In the stakeholders analysis from Drewry, it is stated that the services offered are good, but the price is high. We have queried price levels elsewhere in Europe and conclude that a bandwidth for integrated tariffs (vessel → gate or vice versa) per container range between 100 – 250 euro, and therefore the rates at Sundahöfn can be considered well in that range, even towards the lower end.

### **2.1.6 Alternative 3b “Eimskip + common user terminal”**

Alternative 3b as proposed by Drewry would first of all create quite an advantage for Eimskip, as they can continue their current operating mode. In order to create a level playing field for a new entrant, the facilities at Vogabakki need serious upgrading in the short term (quay expansion, deepening and land expansion). Otherwise, a new entrant, who is less able to offer the service integration as Eimskip and Samskip offer today, would be at a large disadvantage. This would mean that Faxaport would have to invest much earlier than that any volume prognosis would require.

For the remainder, we see little benefit of this alternative over alternative 1/0. A new entrant would bring competition (provided that there is a level playing field), bring international best practice



(provided that the new entrant has such knowledge from its portfolio), but would not have the supply chain integration that Eimskip as incumbent would offer. We also do not expect that a 3<sup>rd</sup> party operator would significantly undercut the tariffs of Eimskip, but be at best in the same range.

Therefore, we see very limited benefit for the shareholders of Faxaport in this alternative, but only the opposite, as investments have to be brought forward to create a concession with enough attraction to attract international terminal operators. Even then, the conditions of this site appear to be less advantageous than the Eimskip site.

### 2.1.7 Overall conclusion on the options

All in all, we are of the opinion that the original Faxaport plan, when timed well, provides an outlook with enough capacity towards the long term future. Through solid concession management, with incentives to improve the sustainability of the terminals, the goals of Faxaport will all be met, and likely against the lowest investment costs. The uniqueness of the offering by Eimskip and Samskip is something that we reckon needs to be cherished and seen as a competitive advantage enabling two Icelandic companies to be successful not only in Iceland, but also on the Transatlantic trade, and within Northern Europe.

## 2.2 Review of the assessment criteria

As mentioned in Drewry’s report, Faxaport is aiming for the following two objectives:

- To ensure optimum competitiveness / efficiency of container terminal operations at Sundahöfn.
- To ensure responsible use of public funds / land and value for money for the local communities / shareholders of Faxaport.

For both objectives, we consider a perfect fit for a Port authority like Faxaport.

In below Table 1, we have structured the criteria after the relationship with the underlying goals:

Table 1: Review of criteria applied in the assessment

Assessment criteria	Efficiency / competitiveness of Sundahöfn	Responsible use of public funds and land	Remarks
1) Clear division of roles and responsibilities – Duty or Profit	x	x	This is not a goal but a means to achieve a goal; the relationship with the goals of Faxaport is unclear.
2) Strategic focus and long term planning	x	x	In all options strategic planning can apply or not.



3) Efficient land use	✓	✓	
4) Terminal efficiency, productivity and reliability	✓	✓	
5) Port and terminal costs to shipping lines and end users	✓	✓	
6) Introduction of global best practice	Via terminal efficiency (criterium 3)	✗	This is a means to achieve efficiency; not a goal in itself.
7) Access to new entrants / additional lines	✗	Via cost to customers (criterium 4)	This is a means to reduce cost (through competition and or efficiency), not a standalone goal.
8) Ability to influence wider supply chain	✗	✗	This does not contribute to the goals, and is not related to the development options
9) Financial returns to Faxaport stakeholders	✗	✓	

In our view, only criteria 3,4 and 9 are distinctive and relevant criteria. The others are means to achieve the same, or are only related topics. Besides, we miss the following criteria that are essential in evaluating the development options:

- 10) Ultimate terminal / port capacity
- 11) Leadtime for the entire supply chain to and from Iceland
- 12) Flexibility of the supply chain to and from Iceland
- 13) Cost for the entire supply chain to and from Iceland

Criteria 10) is relevant in our view because the land available within Reykjavik is scarce, and should be used to the best possible way. One could argue that it's covered in criteria 3); but since it's about land development options, it should be more emphasised.

Criteria 11) is relevant in our view because the exports from Iceland is categorised by substantial volumes of goods that require the shortest possible time to main market like Europe and USA. A fast, efficient and integrated logistics chain with a high degree of rotation is important to achieve that. The same is applicable to part of the fresh import cargo such as fruits and vegetables – which also requires



efficient logistic chain management to meet market demands. Such efficiency for both export and import is beneficial towards sustainability, as alternative air solutions are circa 95% more GHG unfriendly.

Criteria 12) is relevant in our view as the operations at the terminals in Reykjavik allow for flexibility to ensure that cargo can be loaded in the last minute onto the vessel, even when it arrives as LCL cargo. Integration between warehousing (CFS), terminal operations and liner operations create singular incentives which benefit in creating efficiency in the logistics chains for both export and import, and eventually benefit the end-customers as well as the sustainable agenda.

Criteria 13) is relevant in our view as the customer in Iceland is dependent to a large extent on import of all types of goods (as Iceland has limited own production). The goods come from all over the world, through Reykjavik to Iceland (even when going to another port in Iceland; Reykjavik provides the transshipment / Icelandic hub function).

In section 3, an alternative evaluation of the current model as proposed by Drewry is presented, with the relevant criteria from the initial evaluation, complemented by the criteria as suggested by Portwise.

## **2.3 Review of Drewry scoring**

### **2.3.1 Review of the scoring method**

The scoring method applied is a 3-points scale, which is commonly used to express a situation with answers in the range of “disagree”, “neutral”, and “agree”. For this purpose, a 3 point scale is most appropriate. To express a “score”, ranging from 1-3 is, however, not appropriate at all, as the best score is 3 times the lowest score (hence exaggerating the differences). (see for instance <https://www.evalacademy.com/articles/everything-you-need-to-know-about-likert-scales>)

A better method (using a 3 point scale) would be to apply -1 (negative), 0 (neutral) and +1 (positive). An even better method (as the difference are hard to express in a 3-point scale) is a 5 (-2 to +2) or even a 10-point scale (1 – 10).

Of course, as alternative 3a has the highest score (in Drewry’s assessment) on all criteria, it cannot lose. Only the difference can become smaller.

### **2.3.2 Review of the scoring itself**

In the table below, the scoring as provided by Drewry is listed. We will discuss our observations below, with the focus of the preferred option (3a) versus the current model. Overall, Drewry clearly overestimates the efficiency increase that a new operator could bring, while underestimating the negative effects of removing competition by giving out a concession to a single terminal operator.

Option		Alt 1	Alt 2 - integrated berths with dedicated yards		Alt 3a. common user terminal			Alt 3b
Institutional structure		Current model	Integrated port authority and operator	Landlord port authority in JV with stevedore as terminal operator	Integrated port authority and operator	Landlord port authority in JV with stevedore as terminal operator	Third party terminal operator with concession	Third party terminal operator with concession
<u>Example</u>		Lines' dedicated or affiliated terminals are common, e.g. Singapore, Aalborg	None	None	Copenhagen Malmö Port Helsingborg	Terminal des Flandres, Dunkirk Colombo, Sri Lanka	Most common structure globally	Most common structure globally
Attractiveness	Clear division of roles and responsibilities - "Duty" or "Profit"	3	2	2	2	3	3	3
	Strategic focus and long term planning	3	3	3	3	3	3	3
	Efficient land use	1	1	1	3	3	3	2
	Terminal efficiency, productivity and reliability	2	2	2	2	3	3	2
	Port and terminal costs to shipping lines and end users	1	2	2	2	3	3	3
	Introduction of global best practice	1	1	1	1	2	3	2
	Access to new entrants / additional lines	1	2	2	3	3	3	2
	Ability to influence wider supply chain	2	2	2	3	3	3	3
	Financial returns to Faxaport stakeholders	2	2	2	3	3	3	2
	<b>Unweighted score:</b>	<b>16</b>	<b>17</b>	<b>17</b>	<b>22</b>	<b>26</b>	<b>27</b>	<b>22</b>
Feasibility	Organisational expertise - ability to manage terminal operations	3	0	3	0	3	3	3
	Contractual limitations and feasibility to change	3	2	2	0	1	1	3
	<b>Unweighted score:</b>	<b>6</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>6</b>
<b>Attractiveness and feasibility score</b>		<b>22</b>	<b>19</b>	<b>22</b>	<b>22</b>	<b>30</b>	<b>31</b>	<b>28</b>

Figure 4: Option assessment as presented by Drewry

Assessment criteria	A1	A3a	Remarks
1) Clear division of roles and responsibilities – Duty or Profit	3	3	There is no difference between A1 and A3 for this criterium
2) Strategic focus and long term planning	3	3	There is no difference on any alternative (remove criteria)
3) Efficient land use	1	3	In case of a monopoly, land use becomes more efficient only if this serves the operator financially
4) Terminal efficiency, productivity and reliability	2	3	Although an international operator has (likely) more experience with best practice, the incentive to deliver is less in a monopolistic situation.
5) Port and terminal costs to shipping lines and end users	1	3	The integrated operation of both Samskip and Eimskip is likely more efficient than when a 3 <sup>rd</sup>

			party sits in the middle. Hence we see it the opposite.
6) Introduction of global best practice	1	3	Although a global operator will have this access, it's not guaranteed it will be applied. The current operators may hire experts from outside to bring the same experience.
7) Access to new entrants / additional lines	1	3	Both operators allow 3 <sup>rd</sup> party lines to operate. However, there is always the appearance of preferential treatment.
8) Ability to influence wider supply chain	2	3	The current integrated model provides the best opportunity to influence the wider supply chain. A new comer on the Icelandic market will be less able to do so.
9) Financial returns to Faxaport stakeholders	2	3	A new operator (in a monopoly position) will demand a long-term contract. How this can deliver better results than the short term duopolistic situation, we cannot see.

## 2.4 Other general remarks on Drewry's evaluated options

Drewry's evaluation of each alternative were based on the presented situations and characteristics. Part of these underlying considerations, in our opinion, could change or could be improved, as such leading to possible different scoring and eventual conclusions. In addition, a number of these aspects are irrespective of whichever option is selected. Selective key items are elaborated on.

- **Future quay capacity:**

Other berth extension plans than what have been considered in Drewry's evaluation, could be still considered. The quay extension can be also considered irrespectively as per the future overall demands. For example, the presented Faxaport's future plan to fill in Kleppsbakki basin (ref. p51 Drewry report, which were not further evaluated in details) can lead to a total ~1,700m quay (comparable or exceeding the quay lengths of other evaluated options). Similarly, in the presented alt. 1 and 2 (ref. p53 and p54 Drewry report), it is foreseen still possible to extend Vogabakki quay further to achieve a similar quay length and in turn quay capacity as alt. 3a (ref. p55 Drewry report).

- **Land use:**

A terminal's yard storage capacity and land use can be effectively improved via multiple measures, without need for additional space (e.g., ref. to p5 Drewry report) or need to integrate

into a common user terminal. Such improvement measures could be via yard densification by alternative handling systems like RTGs (which is on the roadmap of Eimskip's future development), as well as operational/commercial tactics in container dwell time reductions. Land use optimisation can be also well in line with the objectives and interests of terminal operator, for more space logistics activities / more capacity for more volumes (as compared to the cons statement listed in p.77 Drewry report "land use optimisation not an objective of the terminal operator").

- **Operational flexibility and efficiency:**

The operational flexibility could be considered in multiple elements – e.g., the flexibility for vessel berthing locations along the quay, the flexibility between vessel operation and yard operation, the flexibility for yard and logistics activities at landside, or even flexibility for cargo planning and supply chain arrangement.

To achieve more flexibility in one element may offset the flexibility for the other elements in operation. The integrated port quay in case of a common user terminal (alt.3a) would allow for full vessel berthing flexibility along the entire quay and in turn reduce possible vessel waiting and increase quay capacity. However, vessel berthing deviation could lead to yard operation inefficiencies due to increased driving distances between quay and yard (e.g., load containers stacked as planned berth now have to be transported to a further berth due to the vessel deviation). Because of this, limiting vessel berthing deviation and flexibility is often implemented as a common practice in terminal operation worldwide. Such inefficiencies could happen also at landside for various logistics activities pending on for example the stacking location of containers in yard and the (future) location where the logistics activities take place. As such, the expected "economies of scale from a fully integrated terminal operation (p.90 Drewry report)" from increased berthing flexibility in alt. 3a may not be always possible to achieve, if we factor into consideration these "handshakes" between various points of operation. While for other multi-user alternatives with still separated terminal operations, a concentrated quay-yard-landside operation could still achieve high efficiencies within each terminal site.

- **Port capacity:**

The overall capacity of a terminal / port is eventually a combined results of multiple sub-capacities of terminal/port's quay capacity, yard handling capacity, yard storage capacity, and landside handling capacity (incl. gate and all logistics activities). Balancing all these elements are equally important to achieve the optimum port capacity and competitiveness of container terminal operation at Sundahöfn. A common user terminal that integrates the quay and yard does not necessarily guarantee eventually a higher terminal operation efficiency and a higher capacity, while multi-user terminal set-up can still achieve high efficiency and capacity with proper planning, improvements, and optimisations in place for future operation.



These are, however, not yet fully addressed in Drewry’s evaluation, but would be important to consider into the final decision-making.

### 3. Portwise assessment of development alternatives

Following the evaluation of the Drewry assessment, Portwise has created an alternative assessment of five out of seven development alternatives considered by Drewry. Alternative 2, with an integrated berth and dedicated yards, was already correctly scored as an unfavourable option and is therefore omitted from the new assessment. The remaining development options considered by Portwise are:

- Current model (alt. 1).
- Common user terminal with integrated port authority and operator (alt. 3a-1).
- Common user terminal with landlord port authority in JV with stevedore as terminal operator (alt. 3a-2).
- Common user terminal with 3<sup>rd</sup> party terminal operator with concession (alt. 3a-3).
- Only Vogabakki becomes a common user terminal (alt. 3b).

These 5 shortlisted alternatives will be scored on a scale from 1 to 10 on a total of 16 criteria. Each criteria receives a weight based on relevance and independence. The following criteria are included in the assessment:

- All 9 original attractiveness criteria by Drewry.
- 4 additional criteria added by Portwise.
- Both feasibility criteria by Drewry.
- Capital expenditure added as a feasibility criteria.

The remainder of this chapter is organised as follows. First, the rules for scoring and weighing are outlined. After that, the 5 development alternatives receive scores on all 16 criteria and the criteria are weighted. Finally, weighted and unweighted scores are presented in an overview and compared to the Drewry scores.

#### 3.1 Scoring and weighing rules

Each alternative is scored on a scale from 1 to 10 for each criterium based on how well the alternative meets it. All criteria are formulated in a positive way, so that higher scores are always preferable. Lastly, scores for different criteria are independent, meaning that an option's score on one criterium in principle does not affect the score of on another criterium.

Weights of criteria are from 0 to 10, where higher weights correspond to more important criteria. Higher weights are given to criteria that align well with Faxaport's goals and relevance to Iceland's logistics and economy. Lower weights are given to criteria that (partly) coincide with other criteria or that are a means to achieve the goal specified in another criteria.

The next subsections will use these rules to score alternatives and provide weights to criteria. First, an overview of the scores is provided. Then, the scores and weights are explained are supported.





### 3.2 Scoring results by Portwise

Figure 5 gives an overview of the unweighted scores explained in the previous subsection. Weighted total scores are presented in Figure 6. The current situation (alt. 1) is preferred with both unweighted and weighted scoring. Alternative 3b gets a clear second place, because it keeps some advantages of the current situation. All three variations of the full common user terminal of alternative 3a perform significantly worse. This is striking, because this alternative was the preferred option in the Drewry report. The main difference in the scoring done by Portwise is the inclusion of negative effects from a monopoly terminal operator and the addition of relevant criteria that were not considered. The preference of the current model is strengthened when weighted scores are considered, but the overall conclusions are unchanged.

Category	Criteria	Weight	Alt1-Current model	Alt3a-Common user terminal - Integrated port authority and operator	Alt3a-Common user terminal - Landload port authority in JV with stevedore as terminal operator	Alt3a-Common user terminal - 3rd party terminal operator with concession	Alt3b - 3rd party terminal operator with concession
Drewry criteria	1) Clear division of roles and responsibilities – Duty or Profit	1	7	5	6	9	6
	2) Strategic focus and long term planning	1	7	8	7	6	6
	3) Efficient land use	1	5	6	7	8	5
	4) Terminal efficiency, productivity and reliability	1	7	5	6	5	6
	5) Port and terminal costs to shipping lines and end users	1	8	5	6	4	7
	6) Introduction of global best practice	1	5	4	6	8	6
	7) Access to new entrants / additional lines	1	6	7	7	8	7
	8) Ability to influence wider supply chain	1	5	7	6	4	5
	9) Financial returns to Faxaport stakeholders	1	6	8	7	7	6
<b>Subtotal</b>	<b>Subtotal</b>	<b>9</b>	<b>50</b>	<b>47</b>	<b>51</b>	<b>52</b>	<b>48</b>
Portwise criteria	10) Ultimate port capacity	1	6	6	7	8	7
	11) Leadtime for supply chain	1	10	4	4	3	7
	12) Flexibility of supply chain	1	10	4	4	3	7
	13) Cost for supply chain	1	8	5	6	4	7
<b>Subtotal</b>	<b>Subtotal</b>	<b>4</b>	<b>34</b>	<b>19</b>	<b>21</b>	<b>18</b>	<b>28</b>
Feasibility	14) Capital expenditure	1	5	5	5	5	5
	15) Organisational expertise - ability to manage terminal operations	1	8	3	6	8	8
	16) Contractual limitations and feasibility to change	1	10	4	4	3	5
<b>Subtotal</b>	<b>Subtotal</b>	<b>3</b>	<b>23</b>	<b>12</b>	<b>15</b>	<b>16</b>	<b>18</b>
<b>Total</b>	<b>Total</b>	<b>16</b>	<b>107</b>	<b>78</b>	<b>87</b>	<b>86</b>	<b>94</b>
<b>Average score</b>	<b>Average</b>	<b>1</b>	<b>6.7</b>	<b>4.9</b>	<b>5.4</b>	<b>5.4</b>	<b>5.9</b>

Figure 5: overview of unweighted scoring results by Portwise

Category	Criteria	Weight	Alt1-Current model	Alt3a-Common user terminal - Integrated port authority and operator	Alt3a-Common user terminal - Landload port authority in JV with stevedore as terminal operator	Alt3a-Common user terminal - 3rd party terminal operator with concession	Alt3b - 3rd party terminal operator with concession
Drewry criteria	1) Clear division of roles and responsibilities – Duty or Profit	0	7	5	6	9	6
	2) Strategic focus and long term planning	1	7	8	7	6	6
	3) Efficient land use	8	5	6	7	8	5
	4) Terminal efficiency, productivity and reliability	10	7	5	6	5	6
	5) Port and terminal costs to shipping lines and end users	4	8	5	6	4	7
	6) Introduction of global best practice	2	5	4	6	8	6
	7) Access to new entrants / additional lines	5	6	7	7	8	7
	8) Ability to influence wider supply chain	1	5	7	6	4	5
	9) Financial returns to Faxaport stakeholders	8	6	8	7	7	6
<b>Subtotal</b>	<b>Subtotal</b>	<b>39</b>	<b>194</b>	<b>176</b>	<b>200</b>	<b>196</b>	<b>186</b>
Portwise criteria	10) Ultimate port capacity	7	6	6	7	8	7
	11) Leadtime for supply chain	9	10	4	4	3	7
	12) Flexibility of the supply chain	4	10	4	4	3	7
	13) Cost for supply chain	10	8	5	6	4	7
<b>Subtotal</b>	<b>Subtotal</b>	<b>30</b>	<b>252</b>	<b>144</b>	<b>161</b>	<b>135</b>	<b>210</b>
Feasibility	14) Capital expenditure	0	5	5	5	5	5
	15) Organisational expertise - ability to manage terminal operations	10	8	3	6	8	8
	16) Contractual limitations and feasibility to change	10	10	4	4	3	5
<b>Subtotal</b>	<b>Subtotal</b>	<b>20</b>	<b>180</b>	<b>70</b>	<b>100</b>	<b>110</b>	<b>130</b>
<b>Total</b>	<b>Total</b>	<b>89</b>	<b>626</b>	<b>390</b>	<b>461</b>	<b>441</b>	<b>526</b>
<b>Average score</b>	<b>Average</b>	<b>1</b>	<b>7.0</b>	<b>4.4</b>	<b>5.2</b>	<b>5.0</b>	<b>5.9</b>

Figure 6: overview of weighted scoring results by Portwise



### 3.3 Scoring and weighing by Portwise

We now support scores for the development alternatives based on all criteria considered, each of which assigned a particular weight. The criteria used are:

1. Clear division of roles and responsibilities – Duty or Profit
2. Strategic focus and long-term planning
3. Efficient land use
4. Terminal efficiency, productivity and reliability
5. Port and terminal costs to shipping lines and end users
6. Introduction of global best practice
7. Access to new entrants / additional lines
8. Ability to influence wider supply chain
9. Financial returns to Faxaport stakeholders
10. Ultimate terminal / Port capacity
11. Leadtime for the entire supply chain to and from Iceland
12. Flexibility of the supply chain to and from Iceland
13. Cost for the entire supply chain to and from Iceland
14. Capital expenditure
15. Organisational expertise - ability to manage terminal operations
16. Contractual limitations and feasibility to change

Note that criteria 10–13 have been added by Portwise. 14 and 15 and 16 are the additional feasibility criterium that Drewry had considered separately. The following subsections takes a detailed look at each criteria, providing scores for 5 development alternatives and a weight based on relevance.

#### 3.3.1 Clear division of roles and responsibilities – Duty and Profit

Roles and responsibilities are currently quite well defined. Faxaport provides concessions to Eimskip and Samskip, who operate their respective terminals. Both Eimskip and Samskip are shipping lines who also perform cleaning and warehousing services to their customers, as well as last mile delivery. In this sense, these companies fulfil multiple roles, some of which may internally be considered duties and others for profit. This role division could improve with a common user terminal, but only with a third party operator. This third party would operate the terminal in order to generate profits, while Faxaport would continue to operate as the landlord. Other companies would take responsibility for auxiliary services and last mile delivery.



This criterium is not aligned with any of Faxaport's goals in the Drewry report. Also, it is not aimed at improving the Icelandic supply chain. Therefore, we believe this criterium should be ignored, giving a weight of 0.

### **3.3.2 Strategic focus and long-term planning**

Strategic focus and long-term planning is possible in any alternative considered and so the different options receive similar scores. In case port authority Faxaport would operate the common user terminal, strategic focus and long term planning can most easily be monitored, while a third party operator is more likely to sail in its own course, demanding a long-term concession.

Although strategic focus and long-term planning is important, it is not a goal stated by Faxaport. This may at best be a means to an end, which could be achieved in any alternative. Consequently, this criterium should not have much impact and receives a weight of 1.

### **3.3.3 Efficient land use**

The current reach stacker operations of Eimskip and Samskip are quite efficient when looking at crane productivities, but stacking is not dense, leading to inefficient use of land. A common user terminal would give opportunities to improve this, both through scale advantages and investments in equipment that facilitates denser stacking (although measures like yard densification, and optimisation etc. can be also effectively implemented in other alternatives). Faxaport does not have enough experience to increase land efficiency by itself, this could be achieved through a joint venture. A concession given to a third party operator would be even more attractive. It should be noted that densification is also possible for other alternatives, but a common user terminal has the advantage of a single operational yard.

Efficiency is an important goal to Faxaport, and land is scarce in the Reykjavik urban area. This criterium should therefore be seriously considered and receives a weight of 8.

### **3.3.4 Terminal efficiency, productivity and reliability**

Given the small scale of operations, Eimskip is running quite an efficient waterside operation and offers great and reliable service to customer, as is acknowledged in the Drewry reports. Other alternatives will reduce efficiency because integration of different container handling activities is lost. Furthermore, a common user terminal is likely to lose efficiency quickly, either due a lack of operational experience by Faxaport or because a third party monopolist lacks incentive to operate efficiently and reliably. Therefore, although the current model has plenty of possibilities for improvement, it still scores higher than all other options.

This criterium is directly related to Faxaport's goal of efficiency and responsible use of public funds. It also targets general Icelandic interest and therefore receives a weight of 10.



### **3.3.5 Port and terminal costs to shipping lines and end users**

The Drewry report mentions feedback provided by Eimskip's customers. They find that Eimskip provides good service, but at a high price. Looking at the terminal tariffs that Eimskip imposes on shipping lines, these are not higher than average rates on the European continent (even lower than in several reference cases). Moreover, Eimskip makes convenient use of integrated activities on its terminal (generally an integrated tariff for water- and landside handling per container is in the range of 120 – 250 euro throughout Europe).

Costs to end users will increase in case a common user terminal is developed. A third party operator with a concession will exercise its monopoly power to “milk” the Sundahöfn terminal. Earlier examples of such a policy have been observed in Angola, where a monopoly was achieved by APMT. If Faxaport would operate the common user terminal, inefficiencies would also lead to higher costs to end user. A joint venture would be supervised and unable to exploit its monopoly power, but the absence of competitive drivers would nevertheless result in higher costs compared to the current situation. This has been observed for Yilport's terminal in Oslo. Finally, alternative 3b would lead to a loss of efficiency on Samskip's integrated terminal, while Eimskip would remain cost-effective.

Although this criterium aligns with Faxaport's goals and is relevant to the Iceland economy, we believe that costs of the entire supply chain are most relevant. This is included in criterium 13. Consequently, to avoid double counting, port and terminal costs only receive a weight of 4.

### **3.3.6 Introduction of global best practices**

Best practices are most likely to be introduced by a third party, specifically an experienced global terminal operator. Consequently, the common user alternatives that includes a third party scores higher than the current model.

However, the introduction of global best practices is only relevant to Faxaport's goals and Icelandic interests if it leads to increased efficiency. This criterium is therefore a means to an end rather than a goal and should not have too much impact when evaluating alternatives. It receives a weight of 2.

### **3.3.7 Access to new entrants/additional lines**

In recent years, Eimskip has shown to be able to attract and facilitate other shipping lines at Sundahöfn. So in this sense the current situation is not too restrictive. Nevertheless, we should recognise that a common user terminal with Eimskip as a client would probably be able to attract new entrants more easily. A third party in particular may be able to introduce its existing clients to the Icelandic market.

New entrants are a means to increase competitiveness at Sundahöfn. Although it is not a Faxaport goal in itself, the ability to attract new entrants to the Icelandic market may benefit the supply chain and economy. As a result, this criterium should not be ignored and receives a weight of 5.



### **3.3.8 Ability to influence wider supply chain**

Faxaport would maximise its influence on the wider supply chain if it operated the both terminals at Sundahöfn itself. Currently, the short berth concession given to Eimskip and Samskip also provides significant leverage to the port authority. Since a third party would not accept such a short concession, Faxaport would lose influence on the supply chain.

The ability to influence the wider supply chain is not a goal for Faxaport. This is not the responsibility of the port authority and therefore not something Faxaport should have much ambition towards. So the assigned weight is 1.

### **3.3.9 Financial returns to Faxaport stakeholders**

The concession fee for Eimskip and Samskip consist of the land rent being around 1.5 million euros for Eimskip in 2023. Next to this, terminal operators also pay a fee for each container that comes in or leaves at the waterside. For Eimskip, these fees totalled 4.7 million euros in 2023. So the total duties paid by Eimskip for the container operation total 6.2 million in 2023.

A common user would surely benefit Faxaport's financial position, either through terminal profits generated by the port authority itself, or due to a higher concession fee paid by a third party operator. Since the third party would become the sole terminal operator at Sundahöfn, it should be willing to pay good money for the concession.

Faxaport has a responsibility to remain performing and show healthy financial returns. Though not a main driver for port redevelopment, this is an important criterium, receiving a weight of 8.

### **3.3.10 Ultimate terminal/port capacity**

Although the differences are not extremely large, a common user terminal that involves a third party will reap benefits from the integrated berths that are currently operated separately by Eimskip and Samskip. A third party operating a common user terminal would be most easily able to expand terminal capacity and therefore receives the highest score.

Ultimate port capacity is important for any alternative considered, but only if the capacity is likely to be used. The assigned weight is 7.

### **3.3.11 Leadtime for the entire supply chain to and from Iceland**

With integrated shipping, terminal handling and warehousing services, Eimskip and Samskip are able to minimise leadtime to its customers. Eimskip even creates stowage plan such that high priority container can be discharge easily and with priority. This level of service cannot be simply achieved if the current integrated model disappears. In case only Samskip's terminal becomes common user, lead time would only increase for part of the volume; so alternative 3b still receives a moderate score.



Many fresh and valuable goods are transported to and from Iceland, which will quickly lose value over time. A short leadtime is vital to end customers down the supply chain, giving this criterium a weight of 9.

### **3.3.12 Flexibility of the supply chain to and from Iceland**

The integrated model that Eimskip and Samskip have built offers maximum flexibility that cannot be matched by any other alternative, because the integration of activities would be sacrificed, though only partly in alternative 3b.

Flexibility is valuable in any supply chain, but mostly because it has the potential to reduce lead times. However, flexibility by itself is less important, yielding this criterium of weight of 4.

In a broader perspective, in many ports worldwide, supply integration is taking off. Big operators (DPWorld, PSA, APM Terminals) are acquiring assets beyond the terminals in the supply chain, ranging from intermodal facilities, logistics providers, freight forwarders, to shipping lines. This is mainly driven by the ability to offer services to the end customers which are better integrated than a traditional terminal operators would be able to do so.

### **3.3.13 Cost for the entire supply chain to and from Iceland**

As mentioned with criterium 5, Eimskip has relatively modest terminal rates for shipping lines. Integration of door-to-door delivery provides further costs benefits that a common user terminal could not easily match. A monopoly operator would surely raise tariffs, as has been observed in multiple cases. If Faxaport would operate the common user terminal, inefficiencies would also lead to higher costs to end user. A joint venture would be supervised and unable to exploit its monopoly power, but the absence of competitive drivers would nevertheless result in higher costs compared to the current situation. Finally, alternative 3b would lead to a loss of efficiency on Samskip's integrated terminal, but Eimskip would remain cost-effective.

This criterium may be the most important one of all. It expands on criterium 5 and is the reason why an efficient, flexible terminal is so important. It receives the maximum weight of 10.

### **3.3.14 Capital expenditure**

Capital expenditure is important to Faxaport because sizable investments need to be justified. However, capital expenditure by the port authority depends on the amount and type of investments in Sundahöfn, not the organisation structure. Any organisational alternative is possible with a range of investment options. As a result, all alternatives are scored identically and this criterium receives a weight of 0.

### **3.3.15 Organisational expertise – ability to manage terminal operators**

Organisational expertise is perfectly fine for the current model as well as for a third party common user terminal. Faxaport does not have the expertise to operate a terminal itself; so this variation is



significantly less feasible. A joint venture is preferred in this regard, although much depends on the other organisation involved.

Organisational expertise is a very important feasibility criterium. If the operating party lacks knowledge and experience, this essentially invalidates an alternative completely. This criterium therefore receives the highest weight 10.

#### **3.3.16 Contractual limitations and feasibility to change**

From a contractual point of view, the current model is the only alternative that is perfectly feasible. Eimskip has a long lasting concession for the yard area it uses, meaning a common user terminal can easily be blocked by them until 2037. In this case, only the berth could be made common user, but this would be very inefficient. Furthermore, Samskip will likely not accept its terminal being transformed into a common user terminal while Eimskip can continue to operate without change.

This criterium is greatly important because contractual limitations may critically hinder the implementations of an alternative. It receives a weight of 10.



## 4. Conclusions & recommendations

In the view of Portwise, the recommended option by Drewry (3a) for Faxaport is not the one that serves the goals of Faxaport in the best way possible. It is our expectation that a “controlled monopoly” will lead to:

- Worse service levels to the Icelandic importers and exports
- Less competitive overall supply chain to and from Iceland
- Higher cost to the consumers in the long run

This is because single operator does not have competitors, so bad service and high rates does not lead to significantly less vessels berthing. Portwise considers the current duopoly the most preferred option (i.e. option 0) from the viewpoint of Faxaport’s goals. Densification and electrification can be realised by both parties separately to improve land efficiency and sustainability.

We are also of the opinion that the operations are quite efficient when considering the scale, and the type of equipment used. The degree of integration between landside supply chain, terminal and warehouse operation and shipping line are to be considered best-practice from an international point of view. This facilitates short time to market (for time critical cargo), efficiency in logistics chain for both exports and imports, and flexibility under regularly challenging conditions (storms, snow, schedule changes). It is highly unlikely that such flexibility and resilience will come about with a 3<sup>rd</sup> party operator in the middle of this optimised supply chain. This fact is also recognized by global terminal operators such as DPWorld, PSA and APM Terminals who are heavily investing in the broader supply chain.

Moreover, we do not consider the cost of the supply chain to and from Iceland high, if we compare it to other European ports, which are even operating in more competitive markets (e.g. the Le Havre – Hamburg range). Therefore, the expectation that the costs would significantly come down with the entry of a 3<sup>rd</sup> party operator, is in our view unrealistic.

In order to enable long-term investments on behalf of the two operators, longer concessions for the berth are recommended. Certainty is key in making commitments into yard densification and electrification.

Finally, the current port capacity is already far beyond demand. Immediate expansions of berth or yard are not required, especially not when dwell times are reduced (which should be feasible). In the long term, the development of the quay side and land area between the two terminal will provide the additional capacity.