eISSN: 2721-5717; pISSN: 2747-2124 https://journal.unhas.ac.id/index.php/zonalaut

ZONA LAUT

JOURNAL OF OCEAN SCIENCE AND TECHNOLOGY INNOVATION

Evaluation Of Passenger And Ship Services At Bajoe Ferry Port Using The Csi (Customer Satisfaction Index) Method

Juan Anugrah Alex, Misliah Idris, Wihdat Djafar, Sitti Chairunnisa and Abdul Haris Djalante
Department of Naval Architecture, Hasanuddin University, Indonesia
*juananugrahalex21@gmail.com

Abstract

Bajoe Port is a ferry port located in Bone Regency, South Sulawesi, which connects South Sulawesi Province with Southeast Sulawesi Province and the Eastern Indonesia region. This port is located in Tanete District, East Riattang with an area of 48.88 km2 . This port has a strategic role in connecting maritime trade or the movement of people in the Eastern Indonesia region. As an inter-provincial ferry port. Bajoe Port needs to carry out construction and development of port facilities by considering priority needs and funding capabilities in accordance with laws and regulations. This study aims to evaluate the availability and condition of the main and supporting facilities of Bajoe Port and to analyze the performance of Bajoe Port services to passengers and ships. The analysis method used is the CSI (*Customer Satisfaction Index*) method. This research was conducted by field survey to determine the availability and condition of basic and supporting facilities available at Bajoe Port. To measure the level of passenger satisfaction, an interview method and a questionnaire measuring instrument were used which were distributed to respondents. Based on KM 52 of 2004, it is known that the availability and condition of the main and supporting facilities of Bajoe Port is 63.63% of the available facilities. Based on PM 37 of 2015, it is known that the percentage of passenger satisfaction is 80.55%.

Keywords: Evaluation, Facilities, Services, CSI, Port

1. INTRODUCTION

A port is a location consisting of adjacent land and sea which is used for government and commercial activities such as docking ships, loading and unloading goods, embarking or disembarking passengers and other activities [5]. While the passenger terminal is a public sea transportation terminal that provides services and accommodation for various passenger activities [8]. The ferry transportation that serves Bajoe Port includes , namely KMP Mishima (MSM), KMP Kota Bumi (KTB), KMP Masagena (MSG), KMP Mandala Nusantara (MDL), KMP Fais (FS), KMP Kota Muna (KTM) and KMP Perdana Nusantara (PRD). For the other 2 (two) fleets, they are temporarily not serving the ferry, namely KMP Permata Nusantara (PMT) and KMP Raja Dilaut (RJD) [3]. With the availability of ferry transportation in the form of motor ships, an evaluation of the port is required. To improve service performance, an evaluation of the level of service provided to passengers at the terminal and available port facilities is required. In evaluating services, the port must first meet the quality of service where the public's need for good public services demands a quality of service that can provide comfort when using/receiving the service [2]. Service is generally identical to how the company performs towards its consumers as well as the role of the government towards its people, the impression of bureaucracy that still inherits the colonial 'priyayi' service style is considered a classic problem that needs to be continuously fixed so that the level of public trust increases [6]. Service quality is an achievement in an effort to answer all consumer needs which are divided into 5 (five) *dimensions* , namely, physical evidence (*tangible*), reliability , responsiveness , assurance and empathy *[* 4].

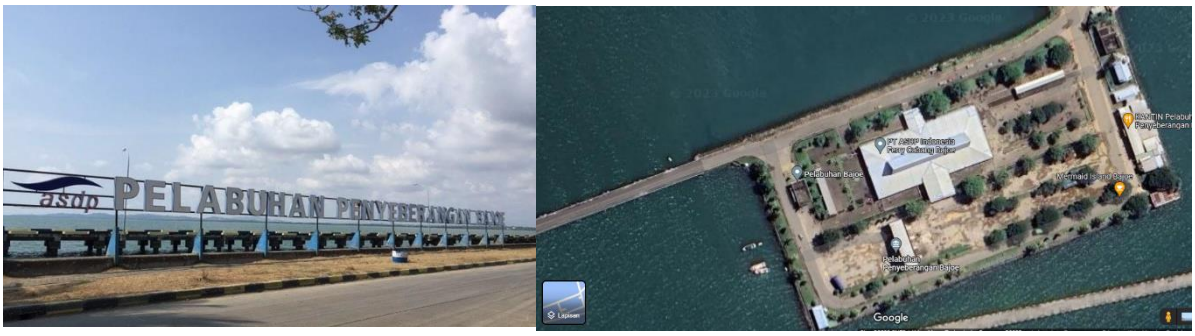


Figure 1. Bajoe Ferry Port

2. METHOD

2.1. Water Area Requirements

According to the Directorate of Ports and Dredging, Directorate General of Sea Transportation, Ministry of Transportation, the calculation of water area requirements is calculated based on the Technical Instructions for Compiling the Boundaries of Work Areas (DLKr) and Port Interest Areas, namely as follows [10]:

1. Port Anchorage Area Calculation

   $A = \pi \times R^2$ (1)

   $R = L + 6\,(D) + 30\,m$

   Where,

   A = Area of water where the anchorage is located/area
   R = Radius of the anchoring place/area
   L = Maximum length of the ship at anchor
   D = Depth of water where anchorage is located (LWS reference)
2. Waters for Ship Transfer Areas

   $A = \pi \times R^2$

   $R = L + 6\,(D) + 30\,m$

   Where,

   A = Area of water where the anchorage is located/area
   R = Radius of the anchoring place/area
   L = Maximum length of the ship at anchor
   D = Depth of water where anchorage is located (LWS reference)
3. Waters/Ponds for Boat Mooring

   A = (1 .5 -1.8) L × (1.2-1.5) L (2)

   Where,

   A = Area of water for ship mooring
   L = Length of ship (LOA)

4. Waters for *Turning* Basin

   $A = \pi \times R^2$

   Where,

   R = D/2 meters
   A = Area of the lap pool
   D = Diameter of the lap pool
   R = Radius of the lap pool
   L = Maximum design ship length (LOA)
5. Waters for Guides and Delays within the DLKr

   A = (L × P) (3)

   Where,

   A = Area of water
   L = Groove width
   P = Length of groove

2.2. Passenger Terminal Requirements

The passenger terminal for sea transportation is an important component in the sea transportation system which is a meeting point between sea transportation and land transportation, a place for controlling or supervising the passenger flow licensing system and functions as a place for passenger transfers, both from similar sea transportation or transfers to land transportation or vice versa [7]. Passenger Terminal capacity planning is based on several components of activities at the terminal, including:

1. The waiting room
2. Canteen
3. Administration
4. Tickets, medical, breastfeeding, toilet, etc.

The formula used in the planning above is based on the Regulation of the Minister of Transportation of the Republic of Indonesia Number 40 of 2022 concerning the Implementation of River and Lake Ports, as follows [14]:

$$A_1 = an\ N.\ x.\ y \quad (4)$$

Where:

A_1 = area of waiting room (m^2)
A = area required for one person (generally a = 1.2 m 2 / person)
n = number of passengers on one ship
N = number of ships arriving/departing at the same time
x = concentration ratio (1.0 -1.6)
y = average fluctuation (1 ,2)

Waiting Room (A1)
Canteen (A2)= 15% x A1 (5)
Administration (A3)= 15% x A1
Tickets, medical, nursing, toilet, etc.
(A4) = 25% x (A1+A2+A3) (6)

So the area of the terminal building required is:

$$A = A_1 + A_2 + A_3 + A_4 \quad (7)$$

2.3. CSI (Customer Satisfaction Index)

Customer Satisfaction Index (CSI) is a method used to measure the index of user satisfaction by considering the level of importance of a service [9]. CSI is needed to determine the overall level of customer satisfaction by considering the level of importance of product or service attributes/items. This method has several advantages over other methods , namely having an efficient nature, which means not only looking at the customer satisfaction index but also obtaining information related to dimensions/items that have high sensitivity and reliability [1]. To determine the value of CSI, the following steps can be taken:

a. Determining *Mean Importance Score* (MIS) and *Mean Satisfaction Score* (MSS). MIS is the average of the importance scores of an attribute. While MSS is the average score for the level of satisfaction derived from the service performance felt by the user. MIS and MSS are calculated using the equation:

$$MIS = \left[\frac{\sum_{i=1}^{n} Y^i}{n}\right] \quad (8)$$

Information:
Yi = Importance value of attribute Y to i
n = Number of respondents

$$MSS = \left[\frac{\sum_{i=1}^{n} X^i}{n}\right] \quad (9)$$

Information:
Xi = Satisfaction value of attribute X to i
n = Number of respondents

b. Calculating *Weight Factor* (WF) or weighted factor. This weight is the percentage of MIS value per indicator to the total MIS of all indicators.

$$WF = \left[\frac{MISi}{\sum_{i=1}^{p} MISi} \times 100\%\right] \quad (10)$$

Information:
MISSION = Average value of i-th interest
$\sum_{i=1}^{p} MISi$= Total average of interests from i to p

c. Calculating *Weight Score* (WS) or weighted score. This weight is the multiplication of WF with the average level of satisfaction.

$$Wsi = WFi \times MSS \quad (11)$$

Information:
WFi = z-weighted factor

d. Determining *Customer Satisfaction Index* (CSI)

$$CSI = \left[\frac{\sum_{i=1}^{p} WSi}{HS} \times 100\%\right] \quad (12)$$

Information:
$\sum_{i=1}^{p} WSi$= Total average of interests from i to p
HS = Maximum scale used or *Highest Scale*

3. RESULTS AND DISCUSSION

3.1. Water Area Requirements

Calculation of water area requirements is needed to evaluate whether the available water area has met the needs of Bajoe Port. Based on the Technical Instructions for the Preparation of Boundaries for Work Areas (DLKr) and Port Interest Areas (DLKp) in 2017, there are several requirements for calculating port water areas that need to be known, including the following [11]:

1. Port Anchorage Area Calculation
   $R = L + 6\ (D) + 30$
   = 71.57 + 6 (4.389) + 30
   = 127.9 m
   $A = \pi \times R^2$
   = 3.14 ×(127.9) ^{2}
   = 51415.36 m $^2 \approx$ 5.14 Ha
2. Waters for Transshipment Areas between Ships
   $R = L + 6\ (D) + 30$
   = 71.57 + 6 (4.389) + 30
   = 127.9 m
   $A = \pi \times R^2$
   = 3.14 ×(127.9) ^{2}
   = 51415.36 m $^2 \approx$ 5.14 Ha
3. Waters/Ponds for Boat Mooring
   $A = (1{,}5 - 1{,}8)\ L \times (1{,}2 - 1{,}5)\ L$
   = (1.8 ×71.57) × (1.5 ×71.57)
   = 128.82 × 107.35
   = 13830.12 m $^2 \approx$ 1.38 Ha
4. Waters for *Turning* Basin
   D = 143.14 m
   R = D/2
   = 143.14/2
   = 71.57 m
   $A = \pi \times R^2$
   = 3.14 ×(71.57) ^{2}
   = 16098.55 m $^2 \approx$ 1.61 Ha
5. Waters for Guides and Delays within the DLKr
   $A = (L \times P)$
   = 102.3 ×1288.26
   = 131783.8 m $^2 \approx$ 13.18 Ha

Table 1. Comparison of Port Water Area Facilities

No.	Facility	Existing (Ha)	Planning (Ha)
1	Anchorage area	0.845	5.14
2	Inter-ship transhipment area	0.845	5.14

3	Pool for boats to dock	1,323	1.38
4	Water for *turning* basin	1.54	1.61
5	Waterways for piloting and towing within the DLKr	-	13.18

Source: Research Results

3.2. Passenger Terminal Requirements

The area of the Bajoe Port passenger terminal is 2160 m2 . Based on these data, it is necessary to know whether the area can accommodate all passengers who will board/disembark. The planning of the terminal building needs consists of several room components such as waiting room, canteen, shipping office , counter, toilet, medical, nursing etc. The planning of each room is given a symbol with A1 (waiting room), A2 (canteen), A3 (shipping office) and A4 (counter, toilet, medical room, nursing etc.). To find out the capacity of the terminal building, based on the Decree of the Minister of Transportation Number 52 of 2004 concerning the Implementation of Ferry Ports, the calculation of the passenger terminal needs is carried out using the following approach formula :

1. The waiting room
   A1 = a × n × N × x × y
   A1 = 1.2 m2 × 1.2 m2 / person × 231 people × 1 × 1.6 × 1.2
   = 532.22 m^2
2. Canteen
   A2 = 15% × A1
   A2 = 15% × 532.22 m^2
   = 79.83 m^2
3. Shipping Office
   A3 = 15% × A1
   A3 = 15% × 532.22 m^2
   = 79.83 m^2
4. Counter, toilet, medical, breastfeeding etc.
   A4 = 25% × (A1 + A2 + A3)
   A4 = 25% × (A1 + A2 + A3)
   = 25% × (532.22 m^2 + 79.83 m^2 + 79.83 m^2)
   = 172.97 m^2

The required passenger terminal area is:

A = A1 + A2 + A3 + A4
= 532.22 m^2 + 79.83 m^2 + 79.83 m^2 + 172.97 m^2
= 864.86 m^2

So, the passenger terminal area requirement for 231 people is 864.86 m2 . Based on the calculation planning of the total area requirement of the Bajoe Port passenger terminal building above of 864.86 m2 compared to the current total area of the passenger terminal building of 2160 m2 , there is no need to add to the terminal building area. The level of use of the passenger terminal building based on the number of passengers above is 40.04 % . However, for the need for a waiting room, if seen from the planning of the waiting room area when the number of passengers is 231 people, an area of 532.22 m2 is needed so that an additional waiting room area is currently needed which is only 441 m2 .

3.3. CSI (Customer Satisfaction Index)

Passenger satisfaction level assessment was analyzed using the CSI (*Customer Satisfaction Index*) method. The assessment of service types is based on passenger service standards in the Regulation of the Minister of Transportation of the Republic of Indonesia Number 37 of 2015.

A. Analysis of Passenger Satisfaction Levels on Safety Service Indicators

Table 2 Safety Service Indicators

No	Statement	MISSION	MSS	WF	W.S.
1	Availability of information regarding safety and health	4.653	4,061	0.165	0.672

2	Availability of fire extinguishers in the port area	4.765	3.133	0.169	0.531
3	Availability of evacuation route signs in the port area	4,582	3,837	0.163	0.625
4	Availability of evacuation assembly points in the port area	4.622	3,694	0.164	0.607
5	Medical room facilities in the port area	4.755	4.071	0.169	0.688
6	Availability of first aid supplies	4.745	3,592	0.169	0.606
	WT		3,729		
	CSI		74.59%		

Description: MIS (*Mean Importance Score)* : Average importance score
MSS (*Mean Satisfaction Score)* : Average performance score
WF (*Weight Factor*) : MIS value/Total MIS value × 100%
WS (*Weight Score*) : WF value × MSS value
WT (*Weight Total*) : Total WS value
CSI : WT/Max Likert scale value × 100%

Source: Data Analysis, 2023

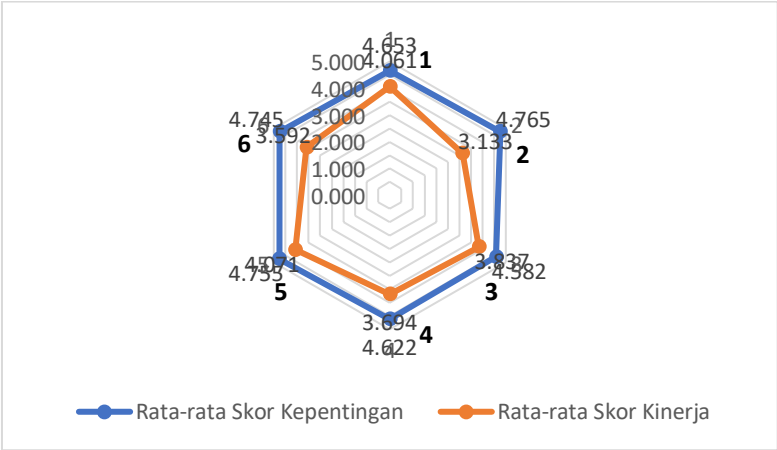


Figure 2. Safety Service Indicator Radar Chart
Source: Data Processing Results

B. Analysis of Passenger Satisfaction Levels on Security and Safety Service Indicators

Table 3 Security and Public Order Service Indicators

No	Statement	MISSION	MSS	WF	W.S.
1	Security and order facilities (CCTV)	4.898	4.459	0.263	1.173
2	Performance of security officers at the port	4,582	4.184	0.246	1,029
3	Information services regarding security disturbances (thuggery)	4.296	2.888	0.231	0.666
4	Availability of waiting room for passengers and drop off/pick up	4,847	4.133	0.260	1,076
	WT		3.944		
	CSI		78.88%		

Description: MIS (*Mean Importance Score)* : Average importance score
MSS (*Mean Satisfaction Score)* : Average performance score
WF (*Weight Factor*) : MIS value/Total MIS value × 100%
WS (*Weight Score*) : WF value × MSS value
WT (*Weight Total*) : Total WS value
Likert scale value × 100%

Source: Data Analysis, 2023

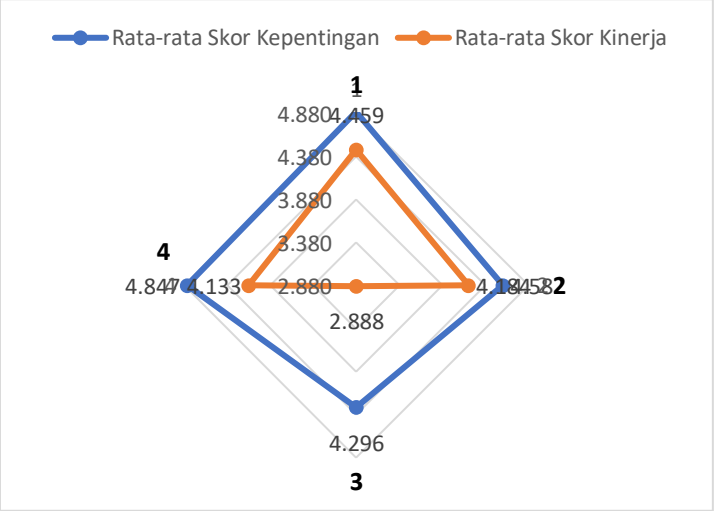


Figure 3. Radar Chart of Security and Public Order Service Indicators
Source: Data Processing Results

C. Analysis of Passenger Satisfaction Levels on Reliability/Regularity Service Indicators

Table 4 Indicators of Reliability/Regularity of Service

No	Statement	MISSION	MSS	WF	W.S.
1	Ease of purchasing tickets/printing ship tickets	4,949	4,500	0.501	2.252
2	Ease of obtaining information regarding ship departure/arrival schedules	4.939	4.327	0.499	2.161
	WT		4.413		
	CSI		88.27%		

Description:
MIS (*Mean Importance Score)* : Average importance score
MSS (*Mean Satisfaction Score)* : Average performance score
WF (*Weight Factor*) : MIS value/Total MIS value × 100%
WS (*Weight Score*) : WF value × MSS value
WT (*Weight Total*) : Total WS value
Likert scale value × 100%

Source: Data Analysis, 2023

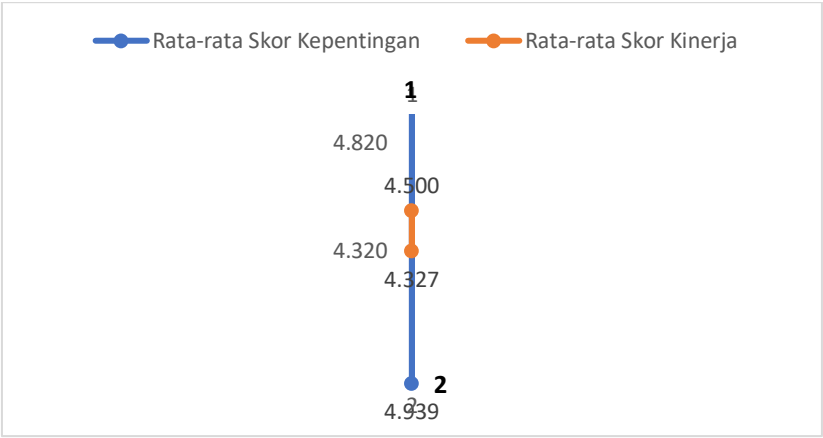


Figure 4. Radar Chart of Reliability/Regularity Service Indicators
Source: Data Processing Results

D. Analysis of Passenger Satisfaction Levels on Comfort Service Indicators

Table 5. Comfort Service Indicators

No	Statement	MISSION	MSS	WF	W.S.
1	Availability of toilet facilities in the port area	4,949	4,531	0.171	0.773
2	Cleanliness of toilets in the port area	4.918	3.378	0.169	0.572

No	Statement	MISSION	MSS	WF	W.S.
3	Availability of worship facilities	4,827	4,571	0.166	0.760
4	Condition of places of worship	4.888	4,571	0.168	0.770
5	Availability of lighting in the port area	4.765	4.194	0.164	0.689
6	Information and access from parking to terminal	4.673	4.020	0.161	0.647
7	Facilities for air circulation (AC/fan/air ventilation)	4.449	3.469	0.153	0.532
8	Sanitation facilities (trash cans)	4,867	4,582	0.168	0.768
	WT		4.211		
	CSI		84.23%		

Description:
MIS (*Mean Importance Score)* : Average importance score
MSS (*Mean Satisfaction Score)* : Average performance score
WF (*Weight Factor*) : MIS value/Total MIS value × 100%
WS (*Weight Score*) : WF value × MSS value
WT (*Weight Total*) : Total WS value
Likert scale value × 100%

Source: Data Analysis, 2023

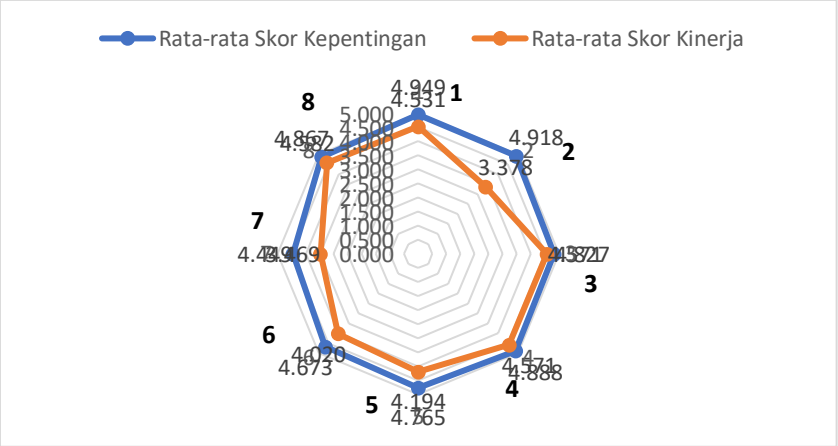


Figure 5. Radar Chart of Comfort Service Indicator
Source: Data Processing Results

E. Analysis of Passenger Satisfaction Levels on Service Convenience Indicators

Table 6 Service Convenience Indicators

No	Statement	MISSION	MSS	WF	W.S.
1	Service information in the terminal area (readable and audible information delivery)	4.929	4,531	0.173	0.783
2	Information on arrival and departure times of **ships**	4.878	4.418	0.171	0.755
3	Availability of facilities for passenger luggage	4.439	3.010	0.156	0.468
4	Availability of passenger service facilities (travel information and complaint services)	4,520	3,561	0.158	0.564
5	Condition of road access in the port area (ease of getting on or off ships)	4.857	4,561	0.170	0.777
6	Availability of parking space (vehicle in and out circulation)	4.908	4.684	0.172	0.806
	WT		4.153		
	CSI		83.06%		

Description:
MIS (*Mean Importance Score)* : Average importance score
MSS (*Mean Satisfaction Score)* : Average performance score
WF (*Weight Factor*) : MIS value/Total MIS value × 100%
WS (*Weight Score*) : WF value × MSS value
WT (*Weight Total*) : Total WS value
Likert scale value × 100%

Source: Data Analysis, 2023

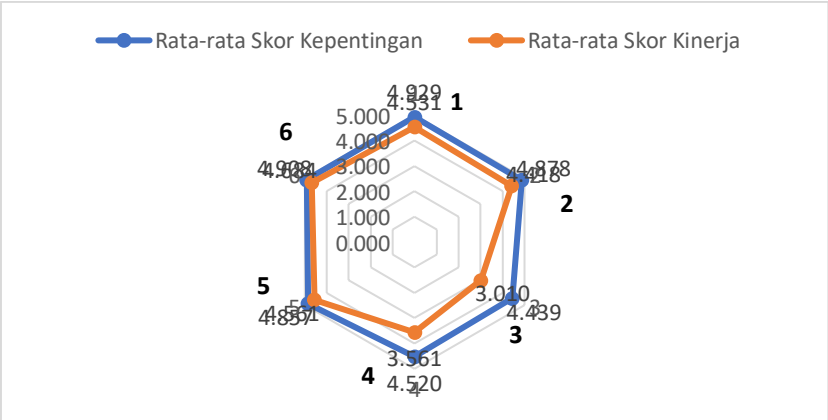


Figure 6. Radar Chart of Service Ease Indicator
Source: Data Processing Results

F. Analysis of Passenger Satisfaction Levels on Equality Service Indicators

Table 7 Indicators of Equality of Service

No	Statement	MIS	MSS	WF	W.S.
1	Special facilities for breastfeeding mothers	4.765	3,745	0.517	1,935
2	Special facilities for the disabled	4.459	3,684	0.483	1,781
	WT		3.715		
	CSI		74.31%		

Description: MIS (*Mean Importance Score)* : Average importance score
MSS (*Mean Satisfaction Score)* : Average performance score
WF (*Weight Factor*) : MIS value/Total MIS value × 100%
WS (*Weight Score*) : WF value × MSS value
WT (*Weight Total*) : Total WS value
Likert scale value × 100%

Source: Data Analysis, 2023

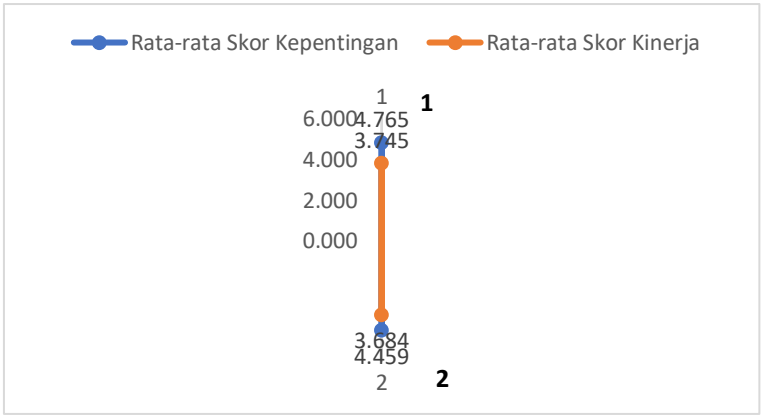


Figure 7 Radar Chart of Equality Service Indicators
Source: Data Processing Results

3.4. Basic and Supporting Facilities of Bajoe Port

The availability and condition of the basic and supporting facilities at Bajoe Port are based on the Decree of the Minister of Transportation Number 52 of 2004 concerning the Implementation of Ferry Ports [12], including the following:

Table 8. Availability and Condition of Basic Facilities at Bajoe Port

No.	Facility	Status	Condition	Eligibility
1.	**Basic Facilities on Land**			
a	Weighbridge	Available	Good	Worthy
b	Vehicle Counter/ *Toll Gate*	Available	Good	Worthy

No.	Facility	Status	Condition	Eligibility
c	Passenger Terminal	Available	Not good	Worthy
d	*Gangway*	Not available	-	-
e	Water, Electricity & Telecommunication Installations	Available	Good	Worthy
f	Fuel Storage Facility	Not available	-	-
g	Road and/or Railway Access	Available	Good	Worthy
h	Fire Fighting Facilities	Available	Good (*hydrant only*)	Not yet worthy
i	Motor Vehicle Waiting Area Before Boarding the Ship	Not available	-	-
j	Parking Area	Available	Good (some not fixed yet)	Worthy
k	Dock	Available	Good	Worthy
2.	**Basic Facilities in Waters**			
l	Shipping Route	Available	Good	Worthy
m	Anchorage Waters	Available	Good (pool depth ± 4 m)	Worthy
n	Harbor Pool for ship mooring and maneuvering needs	Available	Good (pool depth ± 4 m)	Worthy
o	Ship Mooring Facilities	Available	Good	Worthy

Source: Research Survey Results

Table 9 Availability and Condition of Supporting Facilities at Bajoe Port

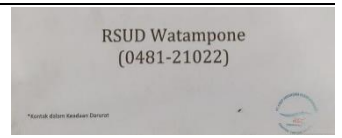
No.	Facility	Status	Condition	Eligibility
1.	**Supporting Facilities on Land**			
a	Shipping Office	Available	Good	Worthy
b	Business Facilities/Canteen	Available	Good	Worthy
c	Port Development Area	Available	Good	Worthy
d	Other Public Facilities (Worship, Parks, Green Belts and Health)	Available	Good	Worthy
e	Waste Shelter	Not available	-	-
2.	**Supporting Facilities in Waters**			
a	Waters for Long-Term Port Development	Not available	-	-
b	Waters for Ship Building and Maintenance Facilities	Not available	-	-
c	Waters for Emergency Purposes	Not available	-	-
d	Waters for Government Ships	Not available	-	-

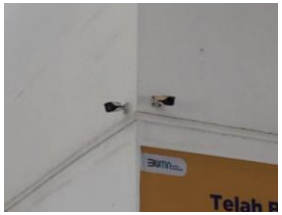
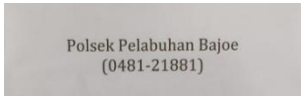
Source: Research Survey Results

3.5. Bajoe Port Support Facilities for Passengers

Identification of the availability and condition of supporting facilities at Bajoe Port for passengers is reviewed based on Ministerial Regulation Number 37 of 2015 concerning Standards of Service for Sea Transportation Passengers for Port Services for Sea Transportation Passengers at Terminals [13]. The supporting facilities can be seen in Table 10.

Table 10 Supporting Facilities of Bajoe Port for Passengers

Type of Service	Facilities and Amenities	Benchmark	Information	Realization		Documentation
				Available	Not available	
SAFETY						
a. Safety information and facilities	Information on the availability and emergency rescue equipment in case of danger (fire, accident or natural disaster)	Safety facility information is readily available and accessible, including: - Fire extinguishers - Evacuation route instructions - Evacuation assembly point - Emergency telephone numbers	Evacuation route directions, evacuation assembly points and emergency telephone numbers are available.	✓		
b. Health information and facilities	Information on availability and health facilities for emergency treatment	Health information and facilities are available that are easy to see and affordable, including: - First Aid Kit - Wheel chair - Stretcher - Medical Officer	First aid kits, wheelchairs and stretchers are available.	✓		
SECURITY AND ORDER						
a. Security and order facilities	Crime prevention facilities	Security and order facilities include: - CCTV available	There are 4 CCTVs and 3 security officers along with them	✓		

Type of Service	Facilities and Amenities	Benchmark	Information	Realization		Documentation
				Available	Not available	
SECURITY AND ORDER						
b. Getting passengers on and off the ship	*Gangway* facilities for passengers to get on and off the ship	Security and order facilities include: - Availability of passenger routes to and from the ship - Ladder for getting on and off the ship equipped with a roof	-		✓	
c. Security posts and officers	The person in charge of maintaining order and smooth circulation of service users at the passenger terminal.	Uniformed posts and officers are readily visible	There are 3 security officers in the passenger terminal area.	✓		
d. Security breach information	Information in the form of stickers containing easily visible complaint telephone numbers and/or SMS.	Stickers are available that are easily visible and clearly readable.	There is a police station telephone number	✓		
e. Security equipment and support	Security support facilities	- *Metal detector* available - Available lighting 200 to 300 lux	-		✓	

ype of Service	Facilities and Amenities	Benchmark	Information	Realization		Documentation
				Available	Not available	
RELIABILITY/REGULARITY						
a. Easy to get tickets	Ship ticket sales/exchanges are adjusted to the ticket counter	- Ticket printing machines available - Maximum ticket printing time is 5 minutes per passenger name	Ticket printing is done via *the barcode* of the ticket purchased online.	✓		
b. Ship departure and arrival schedules	Facilities in the form of audio or visual delivery	Stickers are available that are easily visible and clearly readable.	Departure schedules are announced via monitor and speaker.	✓		
COMFORT						
a. The waiting room	Passenger waiting room/area while waiting for the ship/ *check in*	- For 1 (one) person minimum 0.6 ^{m2} - 100% clean area and no odor coming from inside the passenger terminal area	The number of waiting room seats for passengers is 37. No AC/fan available	✓		

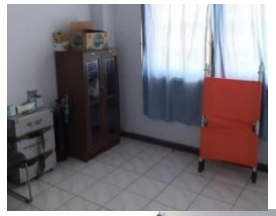
Type of Service	Facilities and Amenities	Benchmark	Information	Realization		Documentation
				Available	Not available	
COMFORT						
b. Boarding gate/corridor	Gate/area where ship tickets are checked	- For 1 (one) person minimum 0.6 ^{m2} - 100% clean area and no odor coming from inside the passenger terminal area	-	✓		
c. Toilet	Toilet facilities for service users	- 1 (one) toilet for 50 passengers and the number of women's toilets is 2 (two) times the number of men's toilets. - 100% clean area and no odor coming from inside the toilet	There are 2 toilets, one each for men and one for women.	✓		 
d. Worship place	Worship facilities	- Prayer room available - 100% clean area and no odor coming from the prayer room	There are 2 AC units and 3 fans and 3 *speakers available.*	✓		
e. Lighting	Light source facilities	200 to 300 lux	The number of lights in the terminal is 100.	✓		

Type of Service	Facilities and Amenities	Benchmark	Information	Realization		Documentation
				Available	Not available	
COMFORT						
f. Temperature control facilities	AC/Fan	Maximum indoor temperature 27ºC	-		✓	
g. Cleaning facilities	Trash bins and cleaning staff are available	100% clean and odorless area coming from the passenger terminal area	There are 9 cleaning staff with 5 trash bins and 3 cleanliness stickers in the passenger terminal.	✓		
h. Port service room	Health service room	- Availability of space for health services - 100% clean area and has tools for health services	There is a medical room	✓		

Type of Service	Facilities and Amenities	Benchmark	Information	Realization		Documentation
				Available	Not available	
FACILITIES						
a. Service information	Information conveyed in the passenger terminal can be heard and read by service users.	- Information in visual form is placed in strategic places that are easy to see and clearly read.	There are monitors and *speakers* for notification of ship arrival/departure schedules along with	✓		

		- Information in *audio form* must be clearly audible with a sound intensity 20 dB greater than the existing noise.	the ship's name.			
b. Ship disruption information	Information in the form of delivery if there is a disruption to the ship's journey	Information will be announced within 10 minutes after the disruption.	-		✓	
c. Further transport information	Information submitted at the port must at least include: - Type of transportation - Ship arrival and departure schedules - Objective - Rates	Placement is easily visible and clearly readable	All information regarding the ship that will depart is conveyed via *speakers* and monitors.	✓		
d. Passenger service facilities	Facilities provided to provide ship travel information and services receive interference	Have a place and 1 (one) work desk and 1 (one) officer who has English language skills	-		✓	
e. Facilities for easy boarding/alightin g of passengers	*Gangway* facilities for passengers	Covered embarkation/disembarkation stairs available	-		✓	
f. Parking lot	Facilities for motorized vehicles using services	- The parking area is adjusted to the available land. - Vehicle circulation in/out of the parking lot is smooth	Parking can accommodate all passenger vehicles for 2, 4 wheels etc.	✓		

g. Passenger baggage service	Passenger baggage facilities	- *Trolleys* and uniformed *porters* are available who have identification and are easily visible. - Good condition and working	-	✓	

Type of Service	Facilities and Amenities	Benchmark	Information	Realization		Documentation
				Available	**Not available**	
EQUALITY						
a. Facilities for the disabled	Facilities that make it easier for disabled service users	Stretchers and wheelchairs available	Indicators are met but there is no *mobile ramp* to make it easier for wheelchair users.	✓		 
b. Nursing room for mothers	Lactation room facilities for breastfeeding mothers	There is a special room with complete facilities for breastfeeding mothers and babies.	There is a nursing room for mothers but it is not suitable for use with the lack of adequate facilities such as air circulation.	✓		

source : Research Results

4. CONCLUSION

1. Based on the results of the analysis of the availability and condition of the main and supporting facilities of Bajoe Port, it is known that 8 of the 22 facilities that must be owned by the port are not available at Bajoe Port, namely *gangway* , fuel storage facilities, ship waste storage, waiting area for motorized vehicles before boarding the ship, waters for long-term port development, waters for ship construction and maintenance facilities, waters for emergency purposes and waters for government ships so that in general the availability of main and supporting facilities in accordance with the KM 52 Year 2004 standard is available at 63.63% with good facility conditions.
2. The performance of Bajoe Port's service to passengers is reviewed from the percentage of overall passenger satisfaction is 80.55% and is included in the satisfied category and based on passenger perception using the *Likert scale* , passengers are satisfied with the available facilities. The percentage level of passenger satisfaction for each service indicator, namely safety 74.59%, security and order 78.88%, reliability/regularity 88.27%, comfort 84.23%, convenience 83.06% and equality 74.31% which when reviewed based on the CSI (*Customer Satisfaction Index*) standard is included in the satisfied and very satisfied category with the largest percentage of reliability/regularity service indicators.

REFERENCES

[1] Amri, Haevah Reza dkk. "Penerapan Metode CSI untuk Pengukuran Tingkat Kepuasan Layanan Manajemen". Jurnal Sistem Cerdas 03, No. 02 (2020): 243-244.

[2] Dewi, Putu Putri A. dkk. 2022. Evaluasi Kualitas Pelayanan SWRO PT Pelabuhan Indonesia (Persero) Sub Regional Bali Nusra Regional 3 dengan Metode Importance Performance Analysis dan TRIZ (Studi Kasus: Pelabuhan Benoa. Repository Politeknik Negeri Bali.

[3] Erika. 2020. Spesifikasi KMP di Pelabuhan Bajoe. Skripsi. Palembang: Politeknik Transportasi SDP.

[4] H. Kartika, M dkk. "Survei Kepuasan Pelanggan Untuk Peningkatan Kualitas Jasa Perawatan Mesin ATM dengan Metode CSI dan IPA". Ind. Inov. J. Tek. Ind Vol. 12, No. 2 (2022): 117-126.

[5] Pangesti, Nadia F. 2022. Penanganan Penurunan Pendapatan Badan Usaha Pelabuhan Batam Akibat Pandemi Covid-19. Skripsi. Semarang: Politeknik Ilmu Pelayaran Semarang.

[6] Patmasari, Eka dkk. "Analisis Kualitas Pelayanan Penumpang Kapal Motor Penyeberangan (KMP) Perdana Nusantara, Pelabuhan Bajoe, Kabupaten Bone". Jurnal Maritim 13, No.1 (2023): 2.

[7] Pradnyadari, Ni Luh A. M. dkk. "Analisis Kinerja Pelayanan Penumpang pada Pelabuhan Dili Timor Leste". Reinforcement Review in Civil Engineering Studies and Management Vol. 1, No. 1 (2022): 12.

[8] Purina, Arien dkk. "Terminal Penumpang Pelabuhan di Tarakan Tema: Neo Vernakular". Jurnal PENGILON 5, No.1 (2021): 467.

[9] Sadika, Prima H. dkk. "Analisis Kepuasan Pengguna Jasa Terhadap Kualitas Pelayanan dengan Metode Customer Satisfaction Index (CSI)". Jurnal Tekno Mesin Vol. 9, No 2 (2023): 53-54.

[10] Suardana, Kadek Dwi C. dkk. "Analisis Kebutuhan Fasilitas Perairan Pada Pelabuhan Kusamba, Desa Pesinggahan Kabupaten Klungkung". Jurnal Widya Teknik Vol. 19, No. 1 (2023): 12.

[11] Keputusan Direktur Jenderal Perhubungan Laut Nomor PP 001/5/2/DJPL-17 Tentang Penetapan Petunjuk Teknis Penyusunan Daerah Lingkungan Kerja dan Daerah Lingkungan Kepentingan Pelabuhan.

[12] Keputusan Menteri Perhubungan Nomor 52 Tahun 2004 Tentang Penyelenggaraan Pelabuhan Penyeberangan.

[13] Peraturan Menteri Perhubungan Nomor 37 Tahun 2015 Tentang Standar Pelayanan Penumpang Angkutan Laut Untuk Pelayanan Pelabuhan Terhadap Penumpang Angkutan Laut di Terminal.

[14] Peraturan Menteri Perhubungan Nomor 40 Tahun 2022 Tentang Penyelenggaraan Pelabuhan Sungai dan Danau.