







RIVER CARGO TRANSPORTATION ASSESSMENT White Nile River SUDAN







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FOREWARD

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1.0 INTRODUCTION

1.1 Objective

Unlike other modes of transportation in Sudan, shipping by river is possible all year, presenting a unique opportunity for humanitarian agencies. Especially during the rainy season, barges provide access to areas not accessible via road. The introduction of new, faster barges will increasingly allow the humanitarian community relatively fast access and reduce reliance on pre-positioning of stock.

The objective of this assessment is to provide the humanitarian community in Sudan with a succinct and updated guide for utilising river cargo transportation, incorporating all logistical aspects and capabilities, booking procedures, operational constraints and other information deemed relevant in aiding the humanitarian community to reach people in need in a timely and cost-effective manner.

1.2 Geographical and Infrastructure Background

Sudan is the largest country in Africa, with the longest stretch of the Nile within its administrative borders. Unfortunately, Sudan also has one of the least developed transportation networks in Africa. The long civil war hindered the development of an already limited network.

The total length of paved highway in Sudan is currently estimated to be about 38,000km. There is a further 2.611km of gravel road, but the majority of roads are un-surfaced dirt tracks that become inaccessible during the rainy season. The country also has 4,789km of narrow-gauge rail lines, of which approximately 40 per cent of that total is out of service. Most of the rail network is found in the North with just one line running between Babanussa, South Darfur to Wau, Western Bahr el Ghazal.

The Nile is the longest river in the world, and 60 per cent of its 6,671km runs through Sudan, making it a pivotal feature of the country's socio-economic landscape. Its two main tributaries – the Blue Nile and White Nile - join at the Sudanese capital, Khartoum. The longest navigable route (1,436km) is the White Nile, which connects Juba in the South to Kosti in the North. This stretch of the river is the focus of this assessment, because of its importance in connecting the North and South of Sudan, and its potential in terms of delivery of humanitarian cargo.

1.3 Current Environment

The past year has seen important changes with the privatisation of the national River Transport Company (RTC) and the emergence of new players and investors looking to capitalise on opportunities arising from peace between North and South.

An increase in the number of new operators on the White Nile corridor between Kosti and Juba means increased capacity as well as increased options for the humanitarian community. At the time of writing, the estimated combined capacity of operators surveyed was approximately 85,000 metric tons, however many of the operators indicate significant expansion activities that will further increase the total capacity in the near future. In addition to increased capacity, the market has recently seen the introduction of modern systems to facilitate the movement of larger volumes of cargo, with greater efficiency.

Hampering market growth, however, is a lack of clarity and availability of documentation regarding government policy and procedures for river cargo transportation, with particular focus on activities in South Sudan. The non-regulation of stevedore services and rates charged are a result of a lack of an oversight body and mechanisms. Problems created by this lack of regulation are, however, recognised by the Government of South Sudan, which has recently established the River Transportation Department of the Ministry of Transport. This department will eventually assume management of all state-owned ports and river activities, including development of infrastructure, navigational aids, handling equipment, dredging, and stevedore services.

1.4 Questions and Additional Information

For further information on any part of this report, or to make comments, additions or corrections, please contact UNJLC at <u>sudan@unjlc.org</u>. Detailed contact information for UNJLC's Logistics Team is included in Appendix C.







2.0 RIVER CORRIDORS, NAVIGATIONAL AIDS AND TRACKING

2.1 River Corridors

The barge route stretches along the White Nile from Kosti through Renk, Malakal, Shambe, Bor, and continuing south through Juba. This stretch of river, also known as the southern reach, is the most important river corridor in Sudan because it provides the only reliable transport connection between the central and southern parts of the country during the rainy season, when roads and airstrips are often compromised.

In addition to the main trunk route provided by the White Nile, tributaries support key neighbouring regions. These tributaries can potentially provide a vital seasonal link enabling humanitarian organizations to access populations in need when water levels allow. A detailed map of the barge corridors is provided on the next page.

The following river corridors are regarded as accessible during the rainy season by currently operating river companies:

- \Rightarrow The Sobat corridor stretches between Malakal and Nassir
- ⇒ The Zeraf River this route is seasonal and is subject to blockage by water hyacinth and silt
- ⇒ The River Bahr el Ghazal route reaches from Malakal to Bentiu
- ⇒ The River Jur can extend up to Wau and provides an alternative to accessing Wau by rail (the line extends from Babanusa)

Due to the seasonal fluctuations of the White Nile (and its tributaries) and the constant water hyacinth menace, passage via these tributaries can not be guaranteed until systems are in place to constantly monitor conditions.

2.2 Navigation Aids and River Conditions

Navigation aids allow operators to identify hazards such as rocks, water hyacinth and wrecks. Since the early 1980s, however, this system has not operated reliably along the White Nile river corridor or its tributaries. Many submerged wrecks and rocks remain unmarked, posing significant risks, particularly when water levels are low.

Some of the new companies operating on the river (particularly NRTC/SRTC, KEER Misc/KEER Marine and Agility Logistics/Tri-Star) are increasingly using new technologies to track barge movements. Global positioning systems (GPS), satellite phones and high-frequency (HF) radios are expected to mark a vast change in the way the river industry operates. Prior to these technological developments, journeys were hard to track and, in the event of an accident or delay, reports were difficult to obtain, if they could be obtained at all.

Proper maintenance of the river bed reduces operators' reliance on navigational aids, however the White Nile river corridor has not been properly dredged since the early 1980s. Operators report that some parts of the corridor need urgent dredging and clearing, particularly the section next to the Juba Port, which contains hazards such as silt build-ups and wrecks. An international company has signed an agreement with the Government of South Sudan to dredge and develop sections of the river. Additionally, some private entities are planning to improve areas next to their proposed new private facilities.













3.0 COMMERCIAL RIVER OPERATORS

3.1 Summary of Commercial Operator Fleets

Though not exhaustive, the table below is a summary of the main operators on the White Nile between Kosti and Juba. These are not sub-contractors, but rather actual fleet owners. There are other independent service providers on the White Nile, however these have not been listed here either because they do not regularly call into the ports or because they did not respond to efforts to contact them for the survey.

The largest operator on the White Nile is New River Transport Company (NRTC)/Sudan River Transport Company (SRTC), which was created by the privatization of the former government-owned River Transport Corporation (RTC). Since the privatization of RTC, other international operators have entered the market such as KEER-MISC/KEER Marine and Agility Logistics/Tri-Star. The current rate of investment in new barges and private ports indicates the huge potential of cargo movement identified between Kosti and Juba.

The below chart summarizes operators reviewed in this report. Details about each then follow.

Supplier	Fleet size and vessel types	Cargo vessel capacity (metric tons)	Estimated total cargo carrying capacity (metric tons)	Maximum passenger capacity (number of passengers)	Principle ports of call	Private port ownership	
NRTC	71 vessels: 13 pushers 8 passenger 50 barges (cargo, flat top, fuel and mixed)	Pushers - 2,000 General cargo and flat top - 500 Fuel - 300	50,000	1,600	Kosti, Renk, Malakal, Shambe, Bor	Kosti. Additional new facilities planned	
SRTC	28 vessels: 8 pushers 18 barges 2 passenger	Pushers - 1,200 General cargo and flat top - 600-900 Fuel - 300 Super barge – 1000	22,200	600	Kosti, Renk, Malakal, Shambe, Bor	tacilities planned for South Suda.	
KEER-MISC/KEER Marine	13 vessels: 2 pushers 2 fuel 4 flat top 5 general	Pushers - 1,800 pushing capacity; General cargo - 450 Flat top - 400 Fuel - 300	10,000	-	Kosti, Renk, Malakal, Shambe, Bor	Kosti. New port planned for Juba.	
Agility Logistics/Tri-Star	2 vessels: 2 fuel barges	Each fuel barge - 500	1,000	-	Kosti, Malakal, Bor, Juba	Kosti, Bor and Juba facilities under development.	
Sernum Fisheries Cooperative Society	27 river boats	10 boats - 10 9 boats - 15 5 boats - 20 2 boats - 30	395	-	Malakal, Shambe, Bor, Juba	None	
Mohamed Khamis	10 river boats	4 boats - 11 3 boats - 15 2 boats - 20 1 boat - 25	154	-	Malakal, Shambe, Bor, Juba	None	
Talha Elyas Babiker	2 vessels: 1 pusher 1 barge	Pusher - 600 pushing capacity Barge - 500	500	-	Kosti, Malakal	None	
Shankin for Trading and Investment Ltd.	8 vessels: 3 pushers 5 barges	Pushers - 600 pushing capacity; Barge - 210	1,050	-	Kosti, Malakal,, Bor, Juba	None	







3.2 SRTC/NRTC

Sudan River Transport Company (SRTC)

Ports of call: All major ports and waypoints between Kosti and Juba

Fleet: 71 vessels currently in fleet

Types of Vessels and Fleet Strength			
Flat top barges	500mt capacity		
General cargo	500mt capacity		
Passenger barges	8 (200 pax each)		
Fuel barges	300mt capacity		
Pushers	13 (2,000mt pushing capacity)		
Small boats (10mt or smaller)	-		
Large boats (over 10mt)	-		

New River Transport Company (NRTC)

Ports of call:	All	major	ports	and	waypoints
	bet	ween K	osti and	d Juba	1

Fleet:28 vessels currently in fleet

Types of Vessels and Fleet Strength			
Flat top barges	450mt capacity		
General cargo	450mt capacity		
Passenger barges	2 (400 pax each)		
Fuel barges	300mt each		
Pushers	8 (1,800mt pushing capacity)		
Small boats (10mt or smaller)	-		
Large boats (over 10mt)	-		

SRTC (Sudan River Transport Company) and NRTC (New River Transport Company) are new companies that were created by the privatization of the Sudan Government-owned River Transport Company (RTC). The majority shareholder in the new venture is the KGL Group in Kuwait. The takeover was completed over a 12-month period and the new entities began operations on 1 July 2008. Both companies have the same general manager and offices, headquartered in Khartoum. The new companies also created an entity in Southern Sudan, the Southern Sudan Trans-Nile Company (SSTC), which is located in Juba.

NRTC currently has 50 operational barges at various stages of rehabilitation from the stock inherited from RTC, with plans to increase this number over the coming years. The fleet includes 13 pushers, plus four which are currently being rehabilitated. The capacity of the NRTC barge per sail is 2000mt (one pusher and four barges). In terms of passenger transport, eight passenger barges, each with capacity for 200 people are also currently being rehabilitated.

SRTC currently has eight pushers and 18 barges. The carrying capacity of its pushers is 1,200mt, while the barges are capable of carrying anywhere between 600mt to 900mt. A few barges in the fleet are capable of carrying 1000mt. SRTC also has two passenger barges currently being rehabilitated, each with a capacity of 200-300 passengers.

Both fleets contain a mixture of flat top, general cargo and fuel barges, and therefore all types of cargo can be transported, including fuel, vehicles, building materials, machinery, containers and food items. Travel times for cargo barges from Kosti to Juba is estimated at 4-5 weeks, excluding loading and off-loading times. The main ports of call are Al Renk, Malakal, Bor and Juba. For passenger barges the journey takes about 10 days. During the dry season the fleet carries 70 per cent of its normal capacity.

3.2.1 Booking Procedures

NRTC and SRTC do not have separate booking procedures or rates for humanitarian cargo. Rates and payment conditions, however, do vary between long-term contractual clients and walk-in/ad hoc clients. Walk-in clients are expected to pay in advance and will likely pay market rates. Contract length depends on discussions with NRTC/SRTC.

Bookings can be made at the NRTC/SRTC offices in Khartoum, Kosti and Juba (SSTC – South Sudan Trans-Nile Company is the holding and operational entity representing NRTC/SRTC in the South). Bookings for barges can be made at the Khartoum offices or at the Kosti Port in the Traffic and Trading Department.

When delivering cargo to the barge, and as part of the booking procedures, comprehensive and accurate documentation is required. Legislation dictating what documentation is required changes often; clients are expected to be aware of and to meet documentation requirements for both North and South Sudan (as applicable).







Required documentation includes (but is not restricted to):

- Contractual agreement between organization and SRTC/NRTC
- Quantity of cargo to be moved
- Certificate of ownership
- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South

Organizations can decide which ports to call at, depending on contractual agreements with NRTC/SRTC. However, it is best to make prior arrangements to avoid delays in loading/offloading.

3.2.2 Rates

Rates are per metric ton or per cubic foot, depending on which is larger, and are approximately US\$250, inclusive of VAT, per metric ton or cubic foot (at the time of writing of this report). The rates are the same during the wet and dry seasons.

NRTC/SRTC allow humanitarian agency staff to accompany cargo on barges free of charge, excluding food and drink.

3.2.3 Insurance

Insurance for cargo is the client's responsibility. NRTC/SRTC are only responsible in the event of the barge sinking or any occurrence that is wholly connected with the running of the barge. On demand, NRTC/SRTC can insure cargo at cost on top of other services offered. Insurance is considered as a value-added service.

NRTC/SRTC maintains standby barges in the event of an emergency or breakdown. Standby barges represent approximately 5 per cent of the total fleet capacity and are positioned in Kosti, Malakal and Juba.

3.2.4 On-Shore Services

In Kosti, cargo loading and offloading is overseen by NRTC/SRTC supervisors to ensure the safe and expedient transfer of goods from vehicles or stores to the barges. NRTC/SRTC is currently refurbishing its quayside as part of its modernization plans. The port facility currently has both mechanized equipment and porter labour for handling. Rates for mechanized handling fluctuate with the market. Manual labor is US\$5 per ton (at the time of writing of



this report). Additionally, NRTC/SRTC has open- and closed-area warehousing in Kosti and is currently developing a covered area storage facility. The closed-area warehousing structures next to the quay are in need of work, but NRTC/SRTC indicates that this is in the pipeline as part of its refurbishment and modernization of assets.

In Juba, loading and offloading of cargo is controlled by a union and, as such, an agreement can be obtained by either the shipper in question or the consignee.

Photo: NRTC/SRTC Barge on White Nile (Source: NRTC/SRTC Kosti, 2008)







3.3 KEER-MISC Logistics/KEER Marine

Ports of call:

Fleet:

13 vessels currently in fleet

All ports and waypoints between Kosti and Juba

Types of Vessels and Fleet Strength				
Flat top barges	4 (400mt each)			
General cargo	5 (450mt each)			
Passenger barges	-			
Fuel barges	2 (300mt each)			
Pushers	2 (1,800mt pushing capacity each)			
Small boats (10 mt or smaller)	-			
Large boats (over 10mt)	-			

The KEER Group currently has four pushers and 15 barges and intends to expand, adding a further six pushers and 24 barges. Each barge has a capacity of 450mt and each set (one pusher plus three or four barges) has a capacity to carry 1800mt. During the dry season, the barges are restricted to approximately 80 per cent of their normal carrying capacity due to the lower level of the river.

The fleet constitutes a mixture of flat top, general cargo and fuel barges, and therefore all types of cargo can be transported, including fuel, vehicles, machinery, containers and food items. KEER does not carry explosive items or weapons. KEER does not have any passenger barges and has no plans to transport passengers on conventional cargo barges.

Travel time from Kosti to Juba is estimated at three to four weeks, excluding loading and offloading times.

3.3.1 Booking Procedures

The KEER Group does not have separate booking procedures or rates for humanitarian cargo. Rates and payment conditions, however, do vary between long-term contractual clients and walk-in/ad hoc clients. Walk-in clients are expected to pay in advance and will likely pay market rates. Contract length depends on discussions with KEER.

Bookings may be made at their offices in Khartoum, while in Juba the Keer Marine facility represents the group's activities in the south.

When delivering cargo to the barge, and as part of the booking procedures, comprehensive and accurate documentation is required. Legislation dictating what documentation is required changes often; clients are expected to be aware of and to meet documentation requirements for both North and South Sudan (as applicable).

These documents include (but not restricted to):

- Contractual agreement between organization and KEER
- Quantity of cargo to be moved
- Certificate of ownership
- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South

Organizations can decide which ports to call at, depending on contractual agreements with KEER. However, it is best to make prior arrangements to avoid delays in loading/offloading.

3.3.2 Rates

Rates are per metric ton or cubic foot, depending on which is larger, and range between US\$250-300 per metric ton or cubic foot (at the time of writing of this report). Rates are the same during the wet and dry seasons.

For return journeys from Juba to Kosti, the price is 50 per cent of the rate from Kosti to Juba and sailing time can be as little as one week (at the time of writing of this report).

KEER allows humanitarian agency staff to accompany cargo on barges free of charge, excluding food and drink.

3.3.3 Insurance

KEER-MISC/KEER Marine insurance only covers its barges and would only apply if a client's cargo was damaged due to its operations or in the event of the barge sinking. All clients are therefore expected to insure their cargo. On demand, KEER MISC/KEER Marine can insure cargo at cost on top of other services offered; insurance, in this case, is considered as a value-added service.







KEER plans to have standby barges in the event of an emergency or in the event of a scheduled barge breaking down. Rates for this standby would be the same as normal barges, depending on cargo load.

3.3.4 On-Shore Services



Pic 3.1.2a, Keer MISC Barge docked in Juba (Source: Francois Henepin 2007)

In Kosti, whether at KEER's private facility or another facility, cargo loading and offloading is overseen to ensure the safe and expedient transfer of goods from vehicles or stores to the barges. KEER Group has almost completed its private port, which is expected to operate 24 hours a day, seven days a week. The private port facility will have both mechanized options and porter labour for handling. Rates for mechanized handling fluctuate with the market. Manual labour is US\$5 per ton (at the time of writing of this report). A covered storage facility in Kosti is under development.

In Juba, loading and offloading of cargo is controlled by a union and, as such, an agreement can be obtained by either the shipper in question or the consignee. The current rate is US\$12 per metric ton (at the time of writing of this report).

KEER also offers a door-to-door service with their trucking fleet at both Kosti and Juba.

3.4 AGILITY Logistics/Tri-Star

Ports of call:

Fleet:

2 vessels currently in fleet

All major ports: Kosti, Malakal, Bor, Juba

Types of Vessels and Fleet Strength		
Flat top barges	-	
General cargo	-	
Passenger barges	-	
Fuel barges	2 (600mt each)	
Pushers	-	
Small boats (10mt or smaller)	-	
Large boats (over 10mt)	-	

Agility Logistics/Tri-Star are active on the river carrying fuel for UNMIS from North to South. Currently, the fleet only consists of two fuel barges (600mt each), for which pushers are rented. Agility Logistics/Tri-Star intend to diversify and expand their river transportation operations and are currently expecting delivery of multiple barges from outside Sudan – being delivered in sections. The group has embarked on construction of private ports and has purchased land in Kosti, Juba, Bor and Malakal as part of the expansion strategy; however current operations rely on existing ports.

3.4.1 Booking Procedures



Photo: Agility Fuel Barge docked in Juba (Source: Agility 2007)

Agility Logistics/Tri-Star does not have separate booking procedures or rates for humanitarian cargo. Rates and payment conditions, however, do vary between long-term contractual clients and walk-in/ad hoc clients. Walk-in clients are expected to pay in advance and will likely pay market rates. Contract length depends on discussions with Agility Logistics/Tri-Star.

Bookings for barges from Agility Logistics/Tri-Star are done at the company's head office in Khartoum.

When delivering cargo to the barge, and as part of the booking procedures, comprehensive and accurate documentation is required. Legislation dictating what documentation is required changes often; clients are expected to be aware of and to meet documentation requirements for both North and South Sudan (as applicable).







These documents include (but not restricted to):

- Contractual agreement between organizationand Agility Logistics/Tri-Star
- Quantity of cargo to be moved
- Certificate of ownership
- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South

Organizations can decide which ports to call at, depending on contractual agreements with Agility Logistics/Tri-Star. However, it is best to make prior arrangements to avoid delays in loading/offloading.

3.4.2 Rates

At the present time, Agility Logistics/Tri-Star do not have an active commercial cargo movement service as their fleet only transports fuel. The rates for fuel transport are subject to negotiation.

3.4.3 Insurance

Agility Logistics/Tri-Star's insurance only covers its barges and would only apply if a client's cargo was damaged due to its operations or in the event of the barge sinking. All clients are therefore expected to insure their cargo. On demand, Agility Logistcs/Tri-Star can insure cargo at cost on top of other services offered. Insurance is considered as a value-added service.

3.4.4 On-Shore Services

Agility Logistics/Tri-Star does not currently offer any on-shore services, however sub-contracting can be arranged upon request.

3.5 Almosheer

Ports of call: All ports between Kosti and Juba

Fleet: One vessel currently in fleet

Types of Vessels and Fleet Strength		
Flat top barges	-	
General cargo	-	
Passenger barges	-	
Fuel barges	-	
Pushers	1	
Small boats (10mt or smaller)	-	
Large boats (over 10mt)	-	

Almosheer's pusher has a deck carrying capacity of 450mt or 300mt of bulk fuel in its tanks, although the pusher can also push a maximum of 1350mt, including its own weight. The company has no barges of its own, but has in the past had access to three River Transport Company barges. With the privatization of RTC, continued long-term access to these barges is not confirmed. The pusher has undergone recent servicing of engines and tow generators and the accommodation facilities are currently being rehabilitated.

This firm has in the past contracted naval assets to move cargo.

3.5.1 Booking Procedures

Almosheer has no separate booking procedures or rates for humanitarian cargo. Availability is on a first-come, first-serve basis and payment is required in advance. Almosheer is open to discussing long-term agreements.

Bookings for barges can be done at Kosti, where the barge is berthed, or through contacts in Khartoum (when present).

When delivering cargo to the barge, and as part of the booking procedures, comprehensive and accurate documentation is required. Legislation dictating what documentation is required changes often; clients are expected to be aware of and to meet documentation requirements for both North and South Sudan (as applicable).

These documents include (but not restricted to):

- Contractual agreement between organization and Almosheer
- Quantity of cargo to be moved
- Certificate of ownership







- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South

It should be noted that, if there are delays in offloading, the barge may proceed to its next port of call or leave the cargo at the port if possible.

3.5.2 Rates

Rates are per metric ton or cubic foot depending on which is larger and range between US\$250-300 per ton or cubic foot, inclusive of VAT (at the time of writing of this report). Negotiation is possible.

3.5.3 Insurance

It is advisable that insurance is taken by the client, as Almosheer does not offer insurance.

3.5.4 On-Shore Services

Almosheer does not currently offer any on-shore services, however sub-contracting can be arranged upon request.

3.6 Talha Elyas Babiker (TEB)

Ports of call: Kosti, Renk, Malakal, and Shambe. Small ports in between can also be accessed.

Fleet: Two vessels currently in fleet

Types of Vessels and Fleet Strength		
Flat top barges	-	
General cargo	1	
Passenger barges	-	
Fuel barges	-	
Pushers	1	
Small boats (10mt or smaller)	-	
Large boats (over 10mt)	-	

TEB operates the El Canal pusher, which has a pushing capacity of 600mt plus two cargo barges attached. Barges can be hired from other companies if necessary, but the company otherwise has no additional barges or pusher. The pusher and the barges were dry-docked several years ago and the entire bottom plating was renewed. Both main engines were overhauled during the same period. The El Canal Pusher has no capacity to push fully loaded barges beyond Shambe as the river currents become strong and the section has many bends. The fuel tanks have limited capacity and the pusher has to take additional fuel to cover corridors such as Juba.

The owners had plans to purchase two barges, one from the River Transport Company (RTC) with a capacity of 450mt and another

from the Egyptian Irrigation Authorities with a capacity of 200mt. However, it is not known whether the sale has gone ahead.

3.6.1 Booking Procedures

TEB has no separate booking procedures or rates for humanitarian cargo. Availability is on a first-come, first-serve basis and payment is required in advance. TEB is open to discussing long-term agreements.

Bookings for barges can be done at Kosti, where the barge is berthed, or through contacts in Khartoum.

When delivering cargo to the barge, and as part of the booking procedures, comprehensive and accurate documentation is required. Legislation dictating what documentation is required changes often; clients are expected to be aware of and to meet documentation requirements for both North and South Sudan (as applicable).

These documents include (but not restricted to):

- Contractual agreement between organizationand TEB
- Quantity of cargo to be moved
- Certificate of ownership
- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South







It should be noted that, if there are delays in offloading, the barge may proceed onto its next port of call or leave the cargo at the port if possible.

3.6.2 Rates

Rates are per metric ton or cubic foot depending on which is larger and range between US\$250-300 per ton or cubic foot, inclusive of VAT (at the time of writing of this report). Negotiation is possible.

3.6.3 Insurance

It is advisable that insurance is taken by the client, as TEB does not offer insurance.

3.6.4 On-Shore Services

TEB does not currently offer any on-shore services, however sub-contracting can be arranged upon request.

3.7 Shanken

Ports of call: All major ports and smaller facilities along the White Nile

Fleet: Eight vessels currently in fleet

Types of Vessels and Fleet Strength		Shanken operates three pushers with a total pushing capacity of
Flat top barges	-	company had arrangements to hire barges from the River Transport
General cargo	5	Company (RTC) when needed, but it is unknown whether this
Passenger barges	-	agreement carried on with the privatization. Shanken worked for
Fuel barges	-	WFP between 2002 and 2003.
Pushers	3	3 7 1 Booking Procedures
Small boats (10mt or smaller)	-	Shanken has no separate booking procedures or rates for Humanitarian Caroo. Availability is on a first-come first-serve basis
Large boats (over 10mt)	-	and payment is required in advance. Shanken is open to discussing long-term agreements.

Bookings for barges can be done at Kosti, where the barge is berthed, or through a contact in Khartoum.

When delivering cargo to the barge, and as part of the booking procedures, comprehensive and accurate documentation is required. Legislation dictating what documentation is required changes often; clients are expected to be aware of and to meet documentation requirements for both North and South Sudan (as applicable).

These documents include (but not restricted to):

- Contractual agreement between organization and Shanken
- Quantity of cargo to be moved
- Certificate of ownership
- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South

It should be noted that, if there are delays in offloading, the barge may proceed onto its next port of call or leave the cargo at the port if possible.

3.7.2 Rates

Rates are per metric ton or cubic foot depending on which is larger and range between US\$250-300 per ton or cubic foot, inclusive of VAT (at the time of writing of this report). Negotiation is possible.

3.7.3 Insurance

It is advisable that insurance is taken by the client, as Shanken does not offer insurance.







3.7.4 On-Shore Services

Shanken does not currently offer any on-shore services, however sub-contracting can be arranged upon request.

3.8 River Boat Companies

The other major modes of transport on the White Nile, though not as extensive in terms of carrying capacity or technology development, are large- and medium-size boats. These boats operate primarily in the South, between Malakal, Bor, Juba and the tributaries in between.

NGOs have primarily used these companies to move medical supplies and mosquito nets to affected populations during the wet season or prior, if there is an opportunity to pre-position stocks. UN agencies have utilized some of these companies to distribute food and shelter materials to affected areas from main operating bases such as Juba.

In this report, two organizations are presented, selected because of their size and experience in working with the humanitarian community; however, there are many small operators who can be found in the ports along this corridor (also refer to Independent Operators, Small Boats 3.3.2). Both organizations presented operate out of Juba Port and do not have private port facilities or mechanized crane services. Each offers transparent contractual arrangements, essential when moving humanitarian cargo. Insurance coverage must be taken by the client, as these fleets tend to operate without insurance, even though they may compensate for losses due to their operations.

3.8.1 Sernum Fisheries Co-operative Society, Juba

Ports of call:	Malakal, Bor, Shambe, Juba, and all tributaries and
waypoints from	Malakal along the White Nile

Types of Vessels and Fleet Strength			
Flat top barges	-		
General cargo	-		
Passenger barges	-		
Fuel barges	-		
Pushers	-		
Small boats (10mt or smaller)	10		
Large boats (over 10mt)	16 (9 boats 15mt, 5 boats 20 mt, & 2 boats 30mt)		

3.8.1.1 Booking Procedures

Sernum has no separate booking procedures or rates for humanitarian cargo. Availability is on a first-come, first-serve basis and payment is required in advance. Sernum is open to discussing long-term agreements.

Documentation needed by small boats to transport cargo within the White Nile and tributaries varies with the operator, however the following documents are recommended as standard attachments:

- Contractual agreement between organizationand the shipper .
- Quantity of cargo to be moved
- Certificate of ownership
- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South

3.8.1.2 Rates

Rates are subject to negotiations and based on prevailing market rates.

3.8.1.3 Insurance

It is advisable that insurance is taken by the client, as Sernum does not offer insurance.

3.8.1.4 On-Shore Services

Sernum does not currently offer any on-shore services, however sub-contracting can be arranged upon request.







3.8.2 Mohamed Khamis, Juba (MK)

Types of Vessels and Fleet Strength	
Flat top barges	-
General cargo	-
Passenger barges	-
Fuel barges	-
Pushers	-
Small boats (10mt or smaller)	-
Large boats (over 10mt)	10 (4 boats 11mt, 3 boats 15mt, 2 boats 20mt, & 1 boat 25mt)

Ports of call: Malakal, Bor, Shambe, Juba, and all tributaries and way points from Malakal along the White Nile

Fleet: 10 boats currently in fleet

3.8.2.1 Booking Procedures

MK has no separate booking procedures or rates for humanitarian cargo. Availability is on a first-come, first-serve basis and payment is required in advance. MK is open to discussing long-term agreements.

Documentation needed by small boats to transport cargo within the White Nile and tributaries varies with the operator, however the following documents are recommended as standard attachments:

- Contractual agreement between organization and the shipper
- Quantity of cargo to be moved
- Certificate of ownership
- VAT forms or VAT exemption forms
- Copy of insurance documentation
- For medical supplies, it may be necessary to get a letter from the Ministry of Health authorizing movement of medicines from North to South

3.8.2.2 Rates

Rates are subject to negotiations based on prevailing market rates.

3.8.2.3 Insurance

It is advisable that insurance is taken by the client, as they do not offer Insurance.

3.8.1.4 On-Shore Services

Not known to have any, however can organize for sub-contracting from market.







4.0 MAIN RIVER PORTS

Though barges and other river transportation vessels call at various locations along the White Nile, the main ports (as identified by humanitarian users) are Kosti, Malakal, Bor and Juba. With the privatization of the River Transport Company (RTC) and the entry of new players into the market the construction of new private ports and facilities is expected to spur the upgrade of existing ports, especially in the South. At the port of Kosti, SRTC/NRTC took over the existing facilities from RTC and has begun major refurbishment along with rehabilitation of barges. Companies are building private ports with their own jetties just as quickly as they are constructing their barges. In South Sudan, existing ports belong to the Government, so private companies have begun investing in land to construct their own facilities.

The below map marks the locations of the ports reviewed in this report. The ports are listed from north to south, with the exception of the SPC Dry Port facility, which is listed last.









4.1 SRTC/NRTC Kosti Port – Private Port

FACTS:

Location - (longitude/latitude):	13 6' 0" & 33 4' 0"
Purpose -built jetty for docking:	Yes
Purpose -built port for docking:	No
Natural embankment:	Yes
Mechanized lifting equipment:	Only at new JICA Jetty (2.5mt capacity)
Mobile mechanized lifting equipment:	On demand, at cost
Manual labour:	Yes
Access route:	Tarmac road access after Kosti bridge to port area
Loading/offloading capacity per day:	8 general cargo barges (estimated) using stevedores
	Mechanised equipment also available if needed
Warehousing capacity:	3 warehousing sheds next to the quayside
	Estimated 300mt capacity each



Photo: Jetty section of New Port Kosti (Source: Fatih Keer 2007)



Photo: Mobile ramp in Kosti, that can be used for vehicles (Source: Francois Henepin 2007)

Connected by rail and asphalt road from Khartoum and Port Sudan, the main Kosti River Port has a shoreline of 800 metres. The vertical quay is 115 metres long, made of masonry with mooring rings and track for cargo handling cranes and vertical forklifts. The rail siding beside the quay is not used. Approximately 20 barges could, in theory, be loaded at the same time; however, this normally does not happen – there is rarely such demand and available labour could not support this volume. Access to the port is easy from either Kosti town or from the main Kosti bridge.

The port facility has workshops for rehabilitating and maintaining barges and small boats. Currently, teams of Egyptian engineers are responsible for the massive rehabilitation project that is under way. There are three very old warehouses made of corrugated iron, due to be overhauled as part of the modernization programme. These warehouses are still in operation and hold goods ranging from food to cement bags. The construction works on the site are vast, with new buildings being constructed and existing ones being rehabilitated. A new server room has been built, from where the core functions of the port and tracking of the barges will be carried out.

Along the quay, one can observe a variety of barges, ranging from the newly modified and rehabilitated to the old and antique, stuck in water hyacinth and slowly rusting away. NRTC/SRTC advises that these unused machines will either be rehabilitated or parts cannibalized to aid in the upgrade process.

Fuel is available from private depots. Shell has 1,750,000-litre capacity and a fuel line to load barges at the main port. Petronas and Agib also have depots with 1,125,000-litre and 650,000-litre capacity, respectively. Neither Petronas nor Agib have fuel line connections to the port.

SRTC/NRTC have a second "port" that was constructed primarily to assist in the movement of internally displaced persons (IDPs) returning to the South and to ease the congestion at the main port. This second port is really only a jetty built on the opposite side of the bridge to the main port. The jetty is located near the Sea Ports Corporation (SPC) facility, and has no storage capacity or permanently constructed buildings. It is primarily composed of a floating dock with metal railings and can load one barge at a time.









Photo: Frontal view of extended docking area of jetty, Kosti (Source: Francois Henepin 2007)



Photo: IDP barge leaving Kosti (Source: Francois Henepin 2007)

4.2 KEER Marine Port, Kosti – Private Port

FACTS:

Location - (longitude/latitude):	Unknown
Purpose-built jetty for docking:	Yes
Purpose-built port for docking:	No
Natural embankment:	Yes
Mechanised lifting equipment:	Only at new JICA Jetty (2.5mt Capacity)
Mobile mechanized lifting equipment:	On demand, at cost
Manual labour:	Yes
Access route:	Tarmac road access before Kosti bridge along rail line
Loading/offloading capacity per day:	Potential to load 4 barges in 24 hours with subcontracted stevedores
	Mechanised equipment on site
Warehousing capacity:	No closed warehousing space on site
	Open warehousing – more than 2,000 square metres

The KEER Marine Port in Kosti is located on the opposite side of the river bank from the NRTC/SRTC main port. This facility is nearing completion and is expected to be complete within 6 months; it however is already operational with the quayside able to handle barges. The facility has barge construction and maintenance areas, which are being used at the moment to construct additional KEER barges. The facility will have a jetty capable of handling 6 barges parked alongside it for loading and offloading activities simultaneously. The jetty will be able to handle mechanized equipment as well as manual labour. The port is meant to cater for KEER clients and will serve them with all aspects related to river transport, from on-site warehousing to loading and offloading all under control. Below are pictures of the port and facilities under construction.



Photo: KEER Port, reclaimed land (Source: Fatih Keer 2007)



Photo: Barge plates for Assembly (Source: Fatih Keer, 2007)







4.3 Renk – State-Managed/Owned Port

FACTS:

Location - (longitude/latitude):	32 48'0" / 11 45'0"
Purpose-built jetty for docking:	Yes
Purpose-built port for docking:	No
Natural embankment:	No
Mechanised lifting equipment:	Yes
Mobile mechanized lifting equipment:	On demand, at cost
Manual labour:	Yes
Access route:	Dirt road to port
Loading/offloading capacity per day:	2 barges per day maximum, depending on stevedore availability
Warehousing capacity:	No covered or open warehousing at the port

This port is accessible year round and is much smaller than Kosti or Juba. Renk has a purpose-built Jetty which is in poor condition, but still functional. The port is owned by the state. Storage facilities exist in Renk, but are privately owned – conditions unknown. There is some mobile mechanized equipment available in Renk belonging to private vendors, but ownership and availability are unknown. In contrast to the situation in Juba, charges for porters in Renk are described as reasonable (in comparison to Juba) by some humanitarian organizations and the porters more amicable; however, the porters still control the port and the rates are not low.

4.4 Malakal – State-Managed/Owned Port

FACTS:

Location - (longitude/latitude)	31.6′.55″/ 9.53′.0″
Purpose-built jetty for docking:	
Fulpose-built jetty for docking.	163
Purpose-built port for docking:	No
Natural embankment:	No
Mechanised lifting equipment:	No
Mobile mechanized lifting equipment:	On demand, at cost
Manual labour:	Yes
Access route:	Dirt road to port
Loading/offloading capacity per day:	3 barges in 24 hours; mechanized equipment on demand
Warehousing capacity:	No covered or open warehousing at the port

Malakal port is accessible year round and is much smaller than Kosti and Juba, both in terms of physical size and the volume of cargo and barges handled. The port is owned by the state; however signs stating management are not visible. Malakal is a primary transit point between Kosti and Juba and is also served by smaller boats that can access the tributaries. The port has a cement pier of approximately 300 metres in length and experiences very little or no silting. As is the case in Juba, no mechanized lifting equipment is available and loading and offloading rely on porters. In Malakal, however, charges for porters are described as reasonable (in comparison to Juba) by some humanitarian organizations, albeit still high, and the porters more amicable.

Malakal has a privately-owned fuel depot with capacity for 60,000 litres of diesel and 60,000 litres of petrol. The fuel is accessible to barges at the port.







4.5 Shambe – State-Managed/Owned Port

FACTS:

Location - (longitude/latitude):	30 46' 8" / 6 6'0"
Purpose-built jetty for docking:	Yes
Purpose-built port for docking:	No
Natural embankment:	No
Mechanised lifting equipment:	No
Mobile mechanized lifting equipment:	On demand, at cost
Manual labour:	Yes
Access route:	Dirt road to port
Loading/offloading capacity per day:	1 barge per day, unknown number of porters on site
	Mechanised equipment on demand
Warehousing capacity:	No covered or open warehousing at the port

Shambe is important as it enables access to the Lakes, Warrap and Unity States. This port has one of the oldest, but sturdiest, jetties built on the White Nile. It was constructed by the British during the colonial period and is in fairly good condition, albeit difficult to access due to an adjacent shallow area. Small barges and boats are able to dock year round; large barges can dock during the wet season. This port would benefit greatly from dredging the channel, to ensure a deeper draught that would give larger vessels access. A depot was also constructed at the same time as the jetty, however its condition is not known. Ownership of the depot is believed to be with the Port Authority. Independent vendors can provide mechanized equipment are available at the port; however availability should be checked in advance, as their activities are not restricted to the port.

4.6 Bor – State-Managed/Owned Port

FACTS:

location - (longitude/latitude):	21 22' /2"/ 6 12'51"
	51 55 45 / 0 12 51
Purpose-built jetty for docking:	No
Purpose-built port for docking:	No
Natural embankment:	Yes
Mechanised lifting equipment:	No
Mobile mechanized lifting equipment:	On demand, at cost
Manual labour:	Yes
Access route:	Dirt road to port
Loading/offloading capacity per day:	2 barges in 24 hours maximum, unknown number of porters on site
	Mechanised equipment on demand
Warehousing capacity:	No covered or open warehousing at the port

Bor port is similar to Juba in that it is a natural embankment alongside which barges can dock; the actual embankment, however, rises slightly higher above the river at Bor than it does at Juba (and at Juba it is suffering from use and erosion). Bor has privately owned storage facilities, contractible when in Bor. Independent vendors offering mechanized equipment are occasionally available at the port. If mechanical equipment is necessary, clients are recommended to book more than a week in advance.







4.7 Juba Port – State Managed/Owned Port

FACTS:

Location - (longitude/latitude):	31 62' 7"/4 84' 6"
Purpose-built jetty for docking:	Yes
Purpose-built port for docking:	No
Natural embankment:	Yes
Mechanised lifting equipment:	Only at new JICA jetty (2.5mt capacity)
Mobile mechanized lifting equipment:	On demand, at cost
Manual labour:	Yes
Access route:	Tarmac from Juba city centre to port area; embankment area not
	paved
Loading/offloading capacity per day:	4 barges per day depending on the number of porters available
	Mechanised equipment on demand
Warehousing capacity:	No covered or open warehousing at the port

The old Juba Port was the River Transport Company's (RTC) port of call. It was abandoned due to silting, however, and construction of the new Juba Port was initiated. The new Juba Port, also known as the Juba Embankment Port, has no infrastructure. It is actually a rapidly receding embankment due to erosion. Despite state ownership, service prices are significantly influenced by private operators. There are no facilities and mooring rings – nearby mango trees are used for mooring.



Photo: Fuel barge and crew (Source: Francois Henepin, 2007)



Photo: Fuel Barge Discharging Product, while Passenger Barge in Back ground (Source: Francois Henepin, 2007)

Offloading is nearly always manual unless a container or other heavy cargo must be moved and, in these cases, mobile cranes from SDV or an independent vendor are required. There is no mechanical equipment at the port, so private operators are the only option (Please refer to the section on Cranes, 5.1). Manual loading and offloading is done under the auspices of a union, which dictates very high rates and will not permit non-union labour being brought in.

The port is owned by the state; however signs stating management are not visible. The port has seen an increase in cargo movement, mainly due to increased trade between North and South, but the present volume is not comparable to that transported in the 1980s.

The Juba Port is also used as a staging point for IDPs returning to the South or transiting to other areas. IDPs camp within the perimeters of the port and, at times, outnumber traders, porters and government officials. There are no toilets or other amenities at the site. People can often be seen, showering and washing clothes next to the barges.

Loading of fuel is done by pumping directly from the storage tanks to waiting tankers, as there are no storage facilities at the port. Pumps are usually brought in by the party that has come to collect the fuel as the old fuel barges have no such system. Fire fighting equipment is not available at the port; nor are there any environmental safeguards in case of a spill, although tankers do have their own extinguishers.

A new jetty has been constructed by JICA as part of its assistance to South Sudan. The jetty has a metal frame and has a gantry crane arm with a capacity of 2.5 metric tons. The facility also has lighting and a perimeter fence (unlike the Juba







embankment port, which is only now adding a fence). This jetty is modern and has storage facilities (open air) and offices for port officials. The port is, however, rarely used due to several factors:



Photo: Juba Port Front facing Barges (Source: Francois Henepin, 2007)

- 1. Ownership of the port was apparently unknown and heavy charges levied for its use. After discussing this point with JICA, clarification was made that the port was handed to the state to enable a more modern approach to handling river cargo.
- 2. The gantry arm is inadequate for moving cargo like containers and generators. Most cargo is offloaded at the old port, where mobile cranes have better access to the barges.
- 3. The construction of the jetty and currents make it difficult for barges to dock. Barge operators report that they tend to hit the sides of the jetty as they come in to dock.
- 4. Resistance to change among porters and other interested parties; the union believes that it will lose its monopoly if this facility sees greater use.

Currently, there are concerted efforts to increase usage of the jetty and to obtain feedback on how the infrastructure should be further developed. If use of the port can be encouraged, there are plans to extend the length of the jetty and develop a modern facility. The Government of South Sudan is on record as saying it would like to transform the area next to the Juba Embankment Port into a light industrial zone, to use in conjunction with shipping facilities. An agreement has been reached with an international shipyard company to build a boat construction yard and to dredge portions of the river around the port.



Photo: Offloading Ramps in Back ground and Embankment being eroded (Source: Francois Henepin, 2007)



Photo: Docking alongside Port/Embankment (Source: Francois Henepin, 2008)







4.8 SPC Dry Port Facility, Kosti, North Sudan

SPC (Sea Ports Corporation) Kosti is a dry dock facility established two years ago to serve western and southern Sudan and to reduce congestion at Port Sudan. The facility is able to handle all forms of cargo from containers to vehicles and food items, but is underutilized. In an effort to promote the facility, SPC Kosti is currently offering discounts on customs charges of up to 50 per cent for users who need to clear goods for South Sudan (if they are not tax exempt). The facility operates on the same system and customs regime as Port Sudan.

The site consists of three bonded warehouses, with a total estimated area of 6,000 square metres. Additionally, there is 500,000 square metres of open area storage, which is expected to grow to approximately 2 million square metres in the next few years as the dry port is upgraded. The port has lifting equipment to cater to containers and other heavy loads. The rates per lift are not currently available. Further information on this facility is available upon request from the port manager, Nadir M. Ahmed – <u>nadirspc@yahoo.com</u>.



Photos: Supplied by SPC Dry Port Facility







5.0 INDEPENDENT SERVICE PROVIDERS

Independent service providers on the White Nile range from the small motorized or paddle-propelled fishing canoes at the banks of the ports to the large multinational or souk crane or fork lift merchants that can be found in Kosti and Juba. The majority of these vendors work directly for cash and are not insured, which means utilizing services provided is a risk; however, the services can prove useful when cranes are needed and those at the port are either engaged or malfunctioning.

5.1 Mobile Crane and Forklift Services

Mobile cranes are a necessary tool in ensuring the safe loading or offloading of heavy or large loads when this cannot be done by manual labour. These loads for the humanitarian community have tended to be cargo such as communication masts, generators and prefabricated accommodation.

5.1.1 Juba and South Sudan Mobile Crane and Forklift Services

In Juba, there are several mobile crane operators. The most recommended and easiest to contact is SDV Transami, whose mobile crane is able to lift containers. SDV is insured and provides documentation for all transactions and agreements undertaken. The mobile crane is, at times, limited in what it can lift, due to the distance between the rapidly eroding embankment and the barge. The boom can only extend a certain distance and still be able to lift very heavy objects. The longer the reach, the less can be lifted. The use of the crane is subject to availability, as it is not dedicated to the river port but used for all lifting activities in Juba.

Deployment costs for all mobile cranes are high, even before lifting costs are taken into consideration. The average cost of deployment to the port is about US\$300 and the charge per lift can be as high as US\$100 (at the time of writing of this report). However, rates are subject to negotiation.

In the other South Sudan ports of call on the White Nile, mobile cranes are not as readily available. Cranes can be deployed from other areas at considerable cost (due to the distance required to move the equipment as well as waiting time should the barge's arrival be delayed).

5.1.2 Kosti Mobile Crane and Forklift Services

In Kosti, unlike Juba, there are many more mobile lifting operators, from the local market to the barge companies who operate their own private ports. The local operators have equipment ranging from light forklifts to heavy duty mobile cranes able to lift over 40 metric tons. Rates are based on prevailing market prices and are subject to negotiation. Most operators do not have insurance.

With the modernization of the NRTC/SRTC ports, new mobile cranes are being brought in to lift more than 45 metric tons, as replacements for the ageing and sometimes poorly maintained gantry cranes. The growing number of private port owners has also resulted in increasing investment in mobile cranes, which owners are willing to hire out. Again, there are no consistent rates, as operators deal with clients on a case-by-case basis and their own ports are given priority. They are, however, insured and legally binding agreements can be set up if need be.

5.2 Small Boat/Canoe Services

Small boat/canoe owners are useful for shifting cargo along tributaries where the large operators won't go either because of physical or economic constraints. Physically, narrow channels, water hyacinth or low water levels may prevent large operators from being able to navigate certain tributaries – all obstacles that can be overcome with a small boat. Economically, large operators may not be willing to travel certain routes because the cargo volume does not present a profitable scenario. All prices are subject to negotiation and market prices may not apply. It is advisable that all cargo be clearly marked and, if possible, staff should travel with the cargo to ensure damage is kept to a minimum and deter possible theft. Small boat/canoe providers do not have insurance and all cargo is carried at owners' risk.

5.3 Stevedores

Stevedores or porters form the backbone of most loading and offloading activities for river vessels on the White Nile. All available porters are part of an informal union that controls pricing and prevents competition within a port. No manual labour can be contracted at a port without the union's permission. Use of mechanized







equipment is accepted when loads are either too heavy or wide for manual handling. Rates for offloading can be negotiated per sail or over an agreed period of between three and six months, but this is not guaranteed.

Generally, a spokesman for the union at the port represents the porters in negotiating pricing and receiving the payment, which is paid in Sudanese pounds. All commercial companies prefer that humanitarian clients negotiate porter services directly, but are also willing to offer it as part of the quotation for sailing. Porters are restricted to working during the daylight hours and dry weather in Juba. In Kosti, floodlights make it possible to load/offload at night. Porters are often willing to work past designated hours for a higher rate. Porters rarely, if ever, have safety clothing and work barefoot between the barge and the loading/offloading areas.

Please refer to the Security (8.0) and Operational Constraints (7.0) sections for more information on porters.







6.0 GOVERNMENT REGULATIONS

6.1 Customs

6.1.1 SPC Kosti Facility, North Sudan

SPC (Sea Ports Corporation) Kosti is a dry dock facility established two years ago to serve western and southern Sudan and to reduce congestion at Port Sudan. The facility is able to handle all forms of cargo from containers to vehicles and food items, but is underutilized. In an effort to promote the facility, SPC Kosti is currently offering discounts on customs charges of up to 50 per cent for users who need to clear goods for South Sudan (if they are not tax exempt). The facility operates on the same system and customs regime as Port Sudan. (For further information, please refer to UNJLC Customs Snapshots 2008, on www.unjlc.org)

6.2 South Sudan Customs Regiment

For South Sudan, the customs officials are present at the port; however, their roles in overseeing customs operations at the facility are not clear. If a humanitarian organization needs to move items from outside Sudan through Juba to the north and west, applications must be made to the South Sudan Relief and Rehabilitation Commission (SSRRC) to obtain the necessary exemption from the Ministry of Finance. The function of government and state officials at Juba Port is not clear and no documentation currently exists clarifying functions, activities, or requirements.

Commercial river operators, for the most part, handle all documentation once a commitment by the client has been made. This includes security clearances and charges.

6.2 Government Oversight

At the time of writing, comprehensive legislation governing river operations was still being developed in South Sudan, with the aim of providing a regulatory framework for all stakeholders involved in river cargo transportation. Specifically with regards to the movement of containers, satellite equipment and vehicles, government regulation is very clear – the commercial river operator facilitates the gathering of the five stamps/signatures required for approval. Approval usually takes three or four working days to obtain. The aim of this procedure is to curtail theft of assets, especially vehicles. Specifically with regards to humanitarian cargo, humanitarian organizations leave all details to the operator unless tax exemption is needed. Humanitarian organizations need to apply to the SSRRC in order to receive the documentation required by the Ministry of Finance to issue tax exempt status. SSRRC is not involved in cargo movement unless it is humanitarian and required exemption. (Please refer to the UNJLC Customs Study 2008 - http://www.unjlc.org/sudan/customs/)

In the North, the same procedure applies in terms of the operator taking care of any documentation, unless any sort of exemption or tax needs to be processed at SPC. For the movement of medicines and vaccines, it would be advisable to seek clarification and any clearance from the Ministry of Health concerning movement of drugs between states, and in this case movement to South Sudan. Importing of alcohol from the South to the North is not allowed.







7.0 OPERATIONAL CONSTRAINTS

7.1 Physical Constraints

Physical constraints to the journey time and operation from Kosti to Juba along the White Nile are significant: shifting sands, low water levels and water hyacinth. Solutions to some of these natural phenomena are being developed and implemented to limit, or at least mitigate the effects of ensure that seasonal disruptions do not occur or are limited in their effects.

7.1.1 Water hyacinth

Water hyacinth is a well-known hazard in African rivers and can seriously restrict movement on waterways due its thick growth and matting. Dealing with water hyacinth requires either intensive human labour to constantly cut the weed or treatment using biological agents, such as beetles. On the main transport channel of the White Nile, this has not yet warranted a dedicated solution. Tributaries are more affected by this phenomenon than the free, fast-flowing main river.

7.1.2 Low water levels and shifting sands

During the dry season the water level in the Nile drops allowing only barges with draughts of 1.2 metres or less to pass, compared to the wet season when draughts can range between 1.6 metres and 1.85 metres. During this period of shallow water, barges carry around 60-75 per cent of their normal cargo volume. Exposed rocks



Photo: Water Hyacinth surrounding a barge (Source: Francois Henepin 2007)

present an additional hazard when water levels are low, carrying the risk of damaging and possibly sinking the barges. Most operators have experienced crews and the necessary equipment to deal with this ever-present threat, however.

Silt and sands carried from the highlands of Uganda and South Sudan constantly alter the White Nile riverbed, especially the depth. Barges can easily become stuck in these shifting sands. Once stuck, the barge may not move for days, until it is either washed free, assisted by a rescue tug or after labour-intensive efforts to move the barge from its quagmire. Dredging projects have been earmarked along several points and ports to mitigate this problem.

7.2 Timetable Constraints

The lack of fixed sailing schedules also poses problems and was a particular concern for the former River Transport Company (RTC). In the past, RTC reported that a lack of pre-planned loading information from clients, along with a lack of efficient mechanized loading equipment had hampered effective planning of required times in port. SRTC/NRTC have indicated that a timetable is now under development and should be publicized early in 2009.

7.3 Handling Constraints

Arguably the most important and critical constraint to using river services along the White Nile (and especially in Juba and Kosti) is the long-established, albeit informal, porters' union (said to have been operating in Juba Port, for example, for as long as commercial barges and boats have been operating).

The stevedores/porters, as mentioned earlier, are not controlled by the state or private companies. Rates for manual labour are exceptionally high, as much as US\$12-17 per metric ton in some cases (at the time of writing of this report). Porters argue that the main reasons for the high rates are that the loading/offloading facilities in the port are very old and unreliable. Commercial operators prefer that humanitarian users negotiate directly with the porters union for services. The control exerted by this union means that no non-unionised labour can







be brought to work in the ports by organizations trying to reduce labour costs. A few humanitarian agencies have attempted this in the past and the meetings ended in near confrontation. Humanitarian agencies in Juba have frequently complained to the Government of South Sudan about these prices, however little progress has been made. It is worth noting, however, that the porters' union does not oppose mechanical equipment being brought in to load containers, vehicles and other heavy equipment that cannot be moved using manual labour.

It is expected that in South Sudan, once the new River Transportation Department, under the auspices of the Ministry of Transport, Government of South Sudan, takes over all government ports in early 2009, the porter cartel will be brought under effective management. In the mean time, the use of private ports will mitigate this expense, as private ports have more control over the porters hired.







8.0 SECURITY CONSTRAINTS

The main security constraint identified during discussions with both commercial operators and humanitarian users of river transport services was the practice by SPLA commanders and militia leaders of boarding/commandeering of vessels in order to transport troops or their families, or to rescue their own stranded vessels. Barge operators have no choice under these circumstances but to let the vessel be used as required. It is important to note, however, that in all reported cases of vessels being commandeered, cargo onboard was never touched.

SRTC/NRTC has managed to resolve this issue by having SPLA troops on board to provide security during voyages. This mitigating measure is expected to bear fruit, as SPLA commanders would be less likely to take over a vessel that is under the protection of one of their colleagues. It is expected that this will enable the smooth flow of barges on the White Nile.

Petty theft is not a common occurrence on the barges, as operators maintain onboard security.

Before the Comprehensive Peace Agreement was signed, barge convoys were periodically attacked and/or shot at. These incidents now happen less often; however, operators continue to maintain onboard security for voyages on the White Nile.







9.0 METHODOLOGY

A structured approach was created so as to ensure that only relevant and accurate details were available to the end user. The assessment was divided into two phases: Phase 1- a literature review and initiating contacts and Phase 2 – stakeholder interviews and field visits. The below information details specifics on information gathering techniques.

9.1 Literature Review

A literature review was conducted to establish an initial platform of knowledge. The main sources reviewed included:

- WFP Logistics Capacity Assessment 2006
- UNJLC IOM RTC River Transport Capacity for Returnees 2007
- WFP Barge Operations in Sudan, Barge Capacity Assessment and Transport Requirements 2004
- WFP Barge Operations in Sudan, Barge Capacity Assessment and Transport Requirements 2003
- River Transport Passenger and Cargo Capacity Study 2005, by Earl James Goodyear and Tim Boucher

9.2 Stakeholder Interviews

Face-to-face interviews were central to obtaining the necessary detail and opinions from the major stakeholders. Information on utilization of the White Nile in reference to the movement of humanitarian cargo is limited.

9.2.1 Humanitarian Actors

Meetings were held with humanitarian organizations already operating or interested in operating on the White Nile. The information gathered during these meetings indicated the needs and constraints which framed the focus of the research and information presented in this document.

9.2.2 Commercial Actors

Meetings were held with commercial operators on the White Nile. The objective of these meetings was to obtain current information on fleet size, ports of call, rates, future development plans, services, and other operational details. Every attempt was made to obtain the most accurate, comprehensive and up-to-date information, however some of the private operators initially identified could not be reached due to a lack of contact information, means of communication, or cessation of activities on the White Nile.

Contact details of interviewed operators were collected and are available in the appendices.

9.2.3 Government Actors

Meetings were held with government officials involved with the regulation of movement of cargo and passengers on the river. The objective of these meetings, especially in South Sudan, was to understand government oversight of river activities.

Contact details were collected and are available in the appendices.

9.3 Port Visits

Areas visited were the prime ports of Juba in South Sudan and Kosti. These two ports handle the bulk of cargo transported on the White Nile. Information collected from these ports was from reliable sources, in particular barge captains.

Information on private port facilities was provided by operators during interviews.

9.4 Photos

Photographs were obtained wherever possible, and have been used with the express permission of those responsible for the sites. Photos were taken during port visits and/or donated by stakeholders.







10.0 APPENDIX

APPENDIX A – Commercial Operator Contact Details

NRTC/SRTC (Nile River Transport Company/Sudan River Transport Company)

Contact:	Eng. Salah Eldin Idris Ali, General Manager
Physical address:	Al-Amarat Street 25, Block 9, Building No.5, Khartoum,
	Sudan
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Fax:	+249 83560033
Mobile:	+249 912 308 521
E-mail:	salah@srtcsd.com

SSTC (South Sudan Transnile Company Limited)

Contact:	Sabit Asholi, Operations Manager
Physical address:	Sun Flower Room 66, Sun Flower Camp, Juba, Sudan
Telephone:	-
Fax:	-
Mobile:	+249 129 511 401, +256 477 110 254
E-mail:	sasholi@hotmail.com, sasholi@yahoo.com

KEER-MISC/KEER MARINE

Contact:	Fatih Keer, Head of Commercial
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Fax:	+249 183 561 717
Mobile:	+249 912 305 198
E-mail:	keertrans@yahoo.com, fatih.keer@keer-misc.com

AGILITY LOGISTICS

Contact:	Karl Mason, Supply Chain Manager	
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Mobile:	+249 912 329 528	
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	kl.mason@tristarsudan.com	

TALHA ELYAS BABIKER

Contact:	T. E. Babiker
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SHANKIN FOR TRADING AND INVESTMENT LTD

Contact:	David Thol Deu
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SERNUM FISHERIES COOPERATIVE SOCIETY

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Fax:	
Mobile:	-

MOHAMED KHAMIS SAID LTD

E-mail:

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APPENDIX B – Government Contact Details

SPC DRY PORT FACILITY, KOSTI

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Mobile:	+249 122 196 4465	
E-mail:	nadirspc@yahoo.com	

Ministry of Transport Representative, Juba Port

Contact:	Zubeir, Juba Port
hysical address: Juba Port	
Telephone:	-
Fax:	-
Mobile:	+249 122 706 589
E-mail:	-

APPENDIX C – UNJLC Contact Details

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