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# **umc.global network**

**Managing data networks over FleetBroadband**

**Digital Ship Dubai 2008**

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Director Business Development

May 2008



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# becker marine systems communication

- becker marine systems with 62 years of maritime experience and more than 7000 vessels installed base, 200 employees, Revenue 2008: 180 Mio € (expected)
- business division ,communication' provides **umc.global network** since 2006,
- 1200+ vessels already subscribed to **umc.global network**,
- 80+ major ports invited for wireless broadband service initiative,
- unique, fully integrated communication and application services
- partner of the maritime content, system and application industry.



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# One stop shop: integrated, cost efficient, secure

- flatrate wireless high-speed access in ports:  
**umc.connect portnet**
- cost efficient broadband near shore:  
**umc.connect 3GSM**
- global broadband satellite based coverage:  
**umc.connect skylink FleetBroadband+**  
**umc.connect skylink VSAT**  
**umc.connect skylink openport+**



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# Advantages of **umc.connect skylink FleetBroadband+**

## Integrated Managed Services:

- Cost Optimized Routing
- Throughput Optimization: x 5-6
- Firewall + VPN
- Antivirus & Antispam
- Content Distribution & Synchronization.
- Remote Management
- Automated Roaming and Backup Routing
- Global 24/7 Maintenance & Service
- One Stop Shopping: Hardware, Software, Service, Airtime



# Rickmers Holding GmbH & Cie.



- FB 500 and FB 250 in combination with VSAT and umc.connect portnet evaluation on two vessels
- throughput enhanced cost optimized routing
- umc.connect communication server
- umc.connect thin office
- managed VPN integration
- roll-out
- operation
- maintenance
- 24/7 global service



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# case study: Rickmers Holding GmbH & Cie. - solution -



# case study: Rickmers Holding GmbH & Cie.

## - Traffic Analysis -



**“In the current tests we are running, the average savings we are seeing on traffic costs is 47 per cent...these savings will continue”**

reduced by a factor of 90 per cent, leaving more space to the user payload.

The second factor is what Müller calls “context-sensitive compression”. This looks at the data in real time and chooses the most appropriate compression algorithm for that type of data file, from a list of algorithms developed specifically for that type of data. This reduces the data that needs to be transferred by around 60 per cent, compared to around 30 per cent with a ‘zipped’ file. Traffic shaping quality of service optimises and prioritises the amount of data that needs to be transferred even further.

The data traffic reduction really comes into its own when the system is used for heavier-duty applications such as weather forecast and routing services, chart updates and remote ship management, as well as FTP file transfers for software or manual updates.

“An FTP file transfer of a 10MB file creates 10MB of data-traffic and around 700kb of overhead using a plain FleetBroadband system,” says Müller. “Using our solution, the same 10MB data file will be shrunk to 3.3MB, and the overhead will be reduced to only 10KB. Furthermore, if a file or document is sent with the ‘umc.connect’

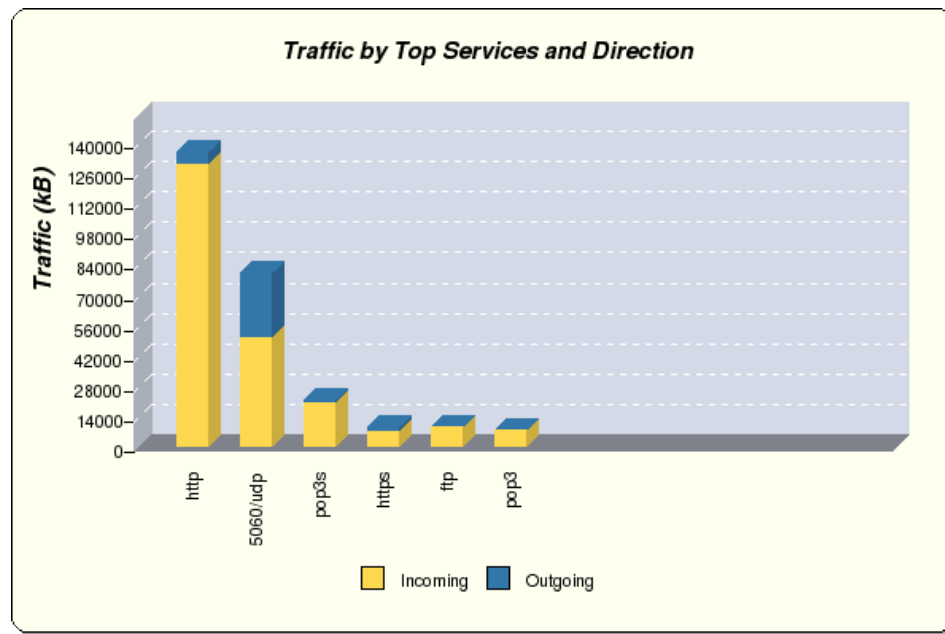
34 via inmarsat

April-June 2008

# Traffic Analysis MS Jakarta Jan 23 to Feb 06, 2008

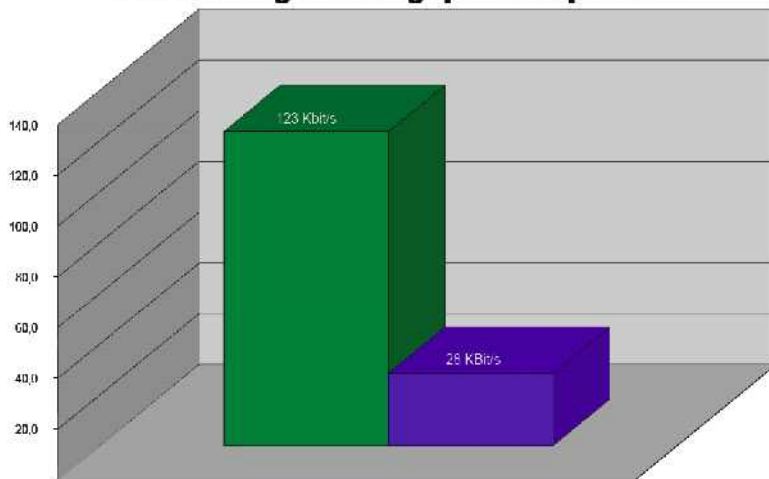


Service	Traffic Direction	Traffic Original	Traffic (kB)	Reduction
<b>http</b>	Incoming	222600	130819	41%
	Outgoing	8790	5344	39%
	Subtotal	231390	136164	41%
<b>5060/udp</b>	Incoming	100724	50588	50%
	Outgoing	45903	29373	36%
	Subtotal	146627	79961	45%
<b>pop3s</b>	Incoming	59491	20651	65%
	Outgoing	2192	735	66%
	Subtotal	61683	21386	65%
<b>https</b>	Incoming	8419	7643	9%
	Outgoing	1817	1391	23%
	Subtotal	10236	9035	12%
<b>ftp</b>	Incoming	24784	8613	65%
	Outgoing	913	312	66%
	Subtotal	25697	8925	65%
<b>pop3</b>	Incoming	19722	7609	61%
	Outgoing	402	183	54%
	Subtotal	20124	7793	61%
<b>Other</b>		22779	11545	49%
<b>Total</b>		518536	274812	47%

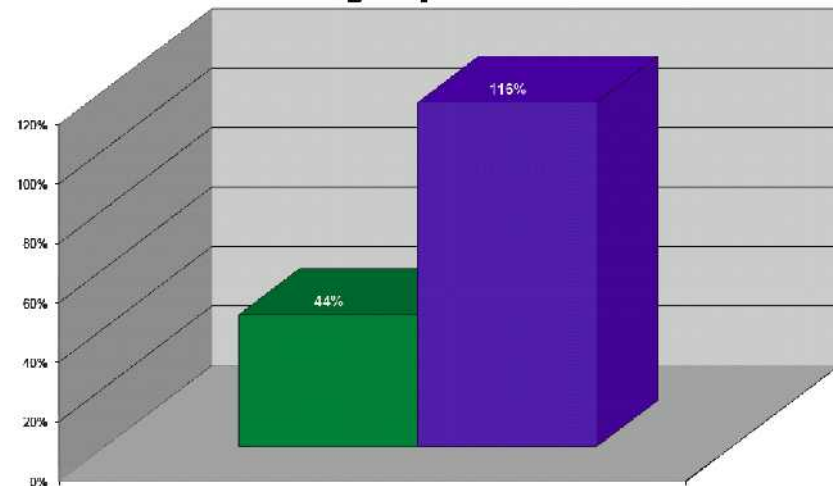


# Results of test in Burum / Inmarsat FB LES

**Total Average Throughput Comparison**



**Total Average Optimization Ratio**



- umc.connect skylink FleetBroadband+ provides up to 5 times the throughput of the original system and reduces web, ftp and mail traffic on average by more than 50%

# Cost Saving FleetBroadband

- Estimated Cost Savings based on results of Burum tests:

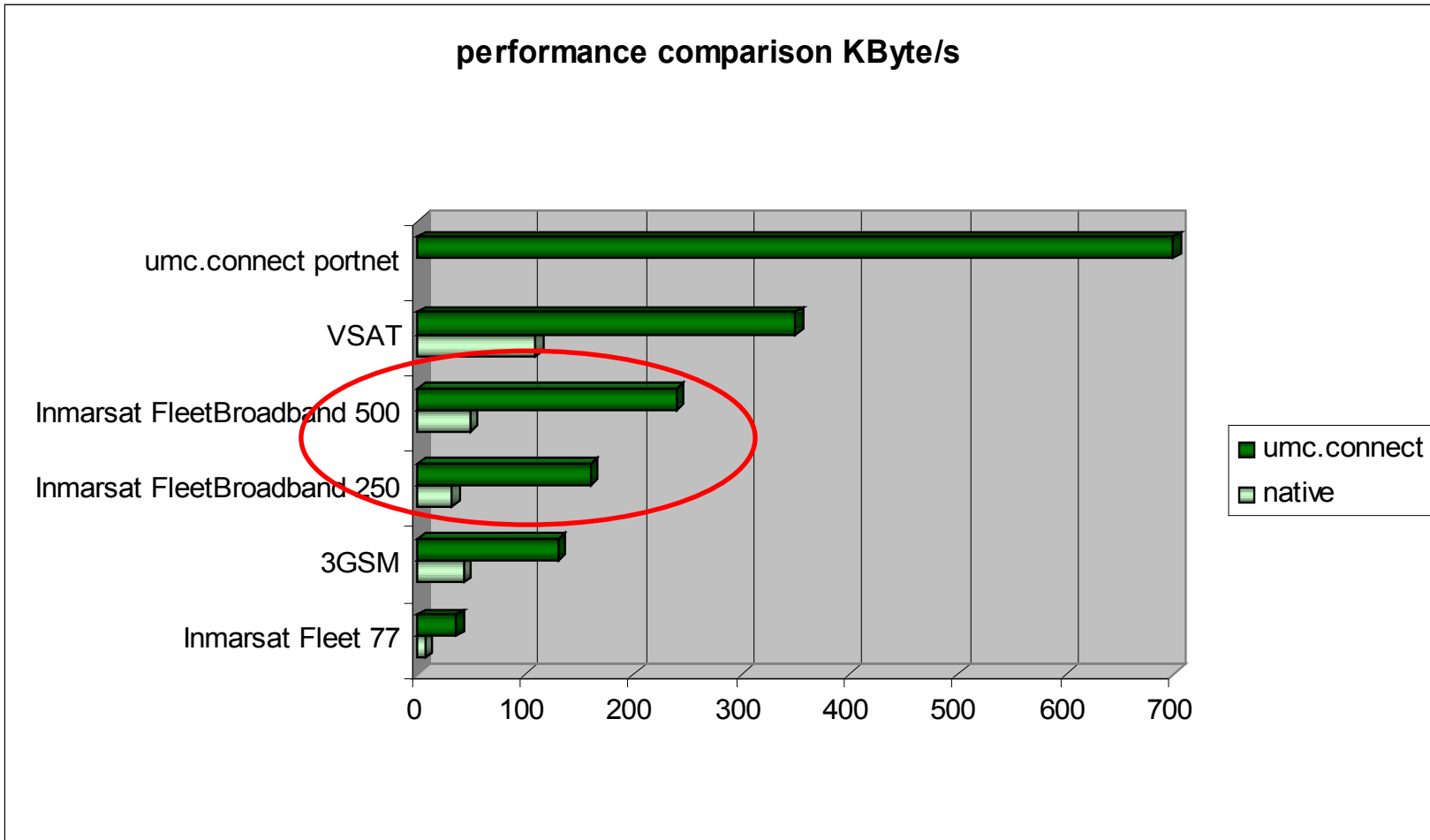
Configuration	Volume in MB	Saving in MB	Saving in %	Saving in €
umc.connect communication server	1.245			
Original volume	2.830	1.584	56%	€ 15.212
Native FB	3.282	2.037	62%	€ 19.558

# **case study:** Rickmers Holding GmbH & Cie. - benefits -



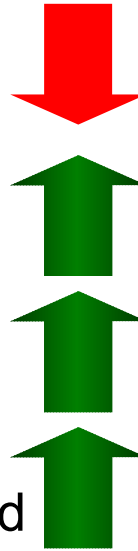
- consolidated vessel hardware and software
- vessel is part of Rickmers global VPN
- Rickmers is disburdened of vessel IT infrastructure
- Rickmers can now focus on applications
- managed security services provide continuous availability
- global broadband communication with calculable cost
- crew services (E-Mail, VoIP, SMS)
- vessel IT and applications can be managed from shore

# performance throughput



# summary: umc.global network benefits

- operation cost
- performance (throughput)
- crew quality of life
- competitiveness, flexibility & speed



# Contact

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# questions & answers



Thank you very much!



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