



QUADRANT  
ENC



Ministerio  
de Transportes  
y Comunicaciones

# AIS Solution For the Peruvian waters

Presentation of a VTS solution  
To the Ministry of Transportation (MTC)  
From Peru  
July - 2013

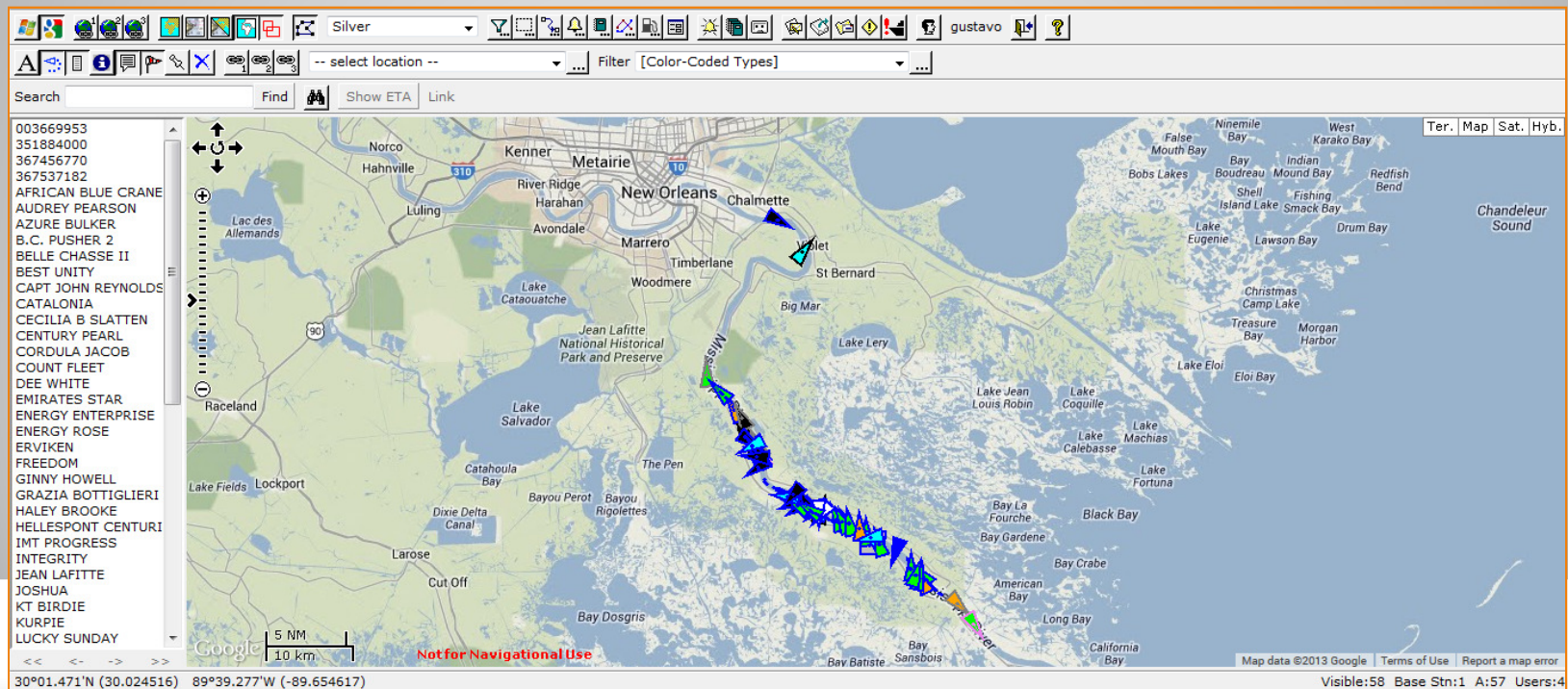
# **Presenting the reality from United States**

Mississippi River – USA

2013

# Project Area

- Web VTS server showing the current AIS coverage including the transportation in real time
- Ability to use a google map or BING in background



# Image data

- Ability to use satellite image from the user or Google images

The screenshot displays a maritime tracking application. At the top is a toolbar with various icons and a 'Silver' dropdown menu. Below this is a search bar with the text '-- select location --' and a 'Filter [Color-Coded Types]' dropdown. A list of ship names is on the left, including '367317270', '367456770', 'CAPT JOHN REYNOLDS', 'CORDULA JACOB', 'ENERGY ROSE', 'HELLESPONT CENTURI', 'INTEGRITY', 'JEAN LAFITTE', 'MARATHA PRIDE', 'MARY PARKER', 'MELISSA LEE', 'MINDORO STAR', 'MYNIKA', 'NORD OPTIMISER', 'OSG HONOUR', 'SAINT CHARLES', 'STEPHEN WARDEN', 'TRINITY', 'UNCLE JOHN', and 'WHIRLAWAY'. The main map area shows a satellite image of a river with a ship 'ENERGY ROSE' highlighted. A popup window for 'ENERGY ROSE' provides the following details:

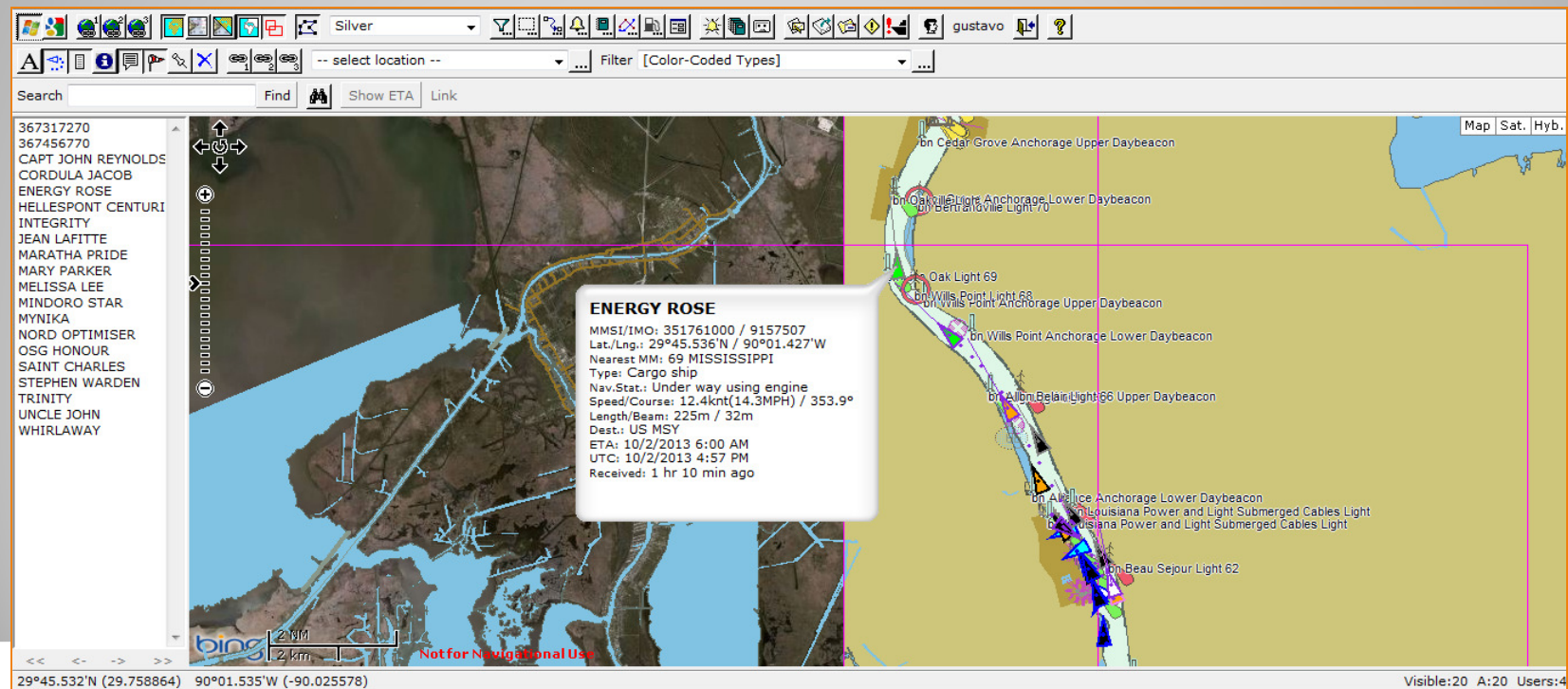
- MMSI/IMO: 351761000 / 9157507
- Lat./Lng.: 29°45.536'N / 90°01.427'W
- Nearest MM: 69 MISSISSIPPI
- Type: Cargo ship
- Nav.Stat.: Under way using engine
- Speed/Course: 12.4knt(14.3MPH) / 353.9°
- Length/Beam: 225m / 32m
- Dest.: US MSY
- ETA: 10/2/2013 6:00 AM
- UTC: 10/2/2013 4:57 PM
- Received: 1 hr 9 min ago

The bottom of the interface shows coordinates '29°45.585'N (29.759758) 90°01.493'W (-90.024891)', a 'bing' logo, a scale bar, and a 'Not for Navigational Use' warning. The footer contains copyright information: '© 2011 SiiTech Inc. All rights reserved. | Legal Information | Contact Us' and 'Web VTS Pro Plus v7.2.2 Powered by SiiTech'.



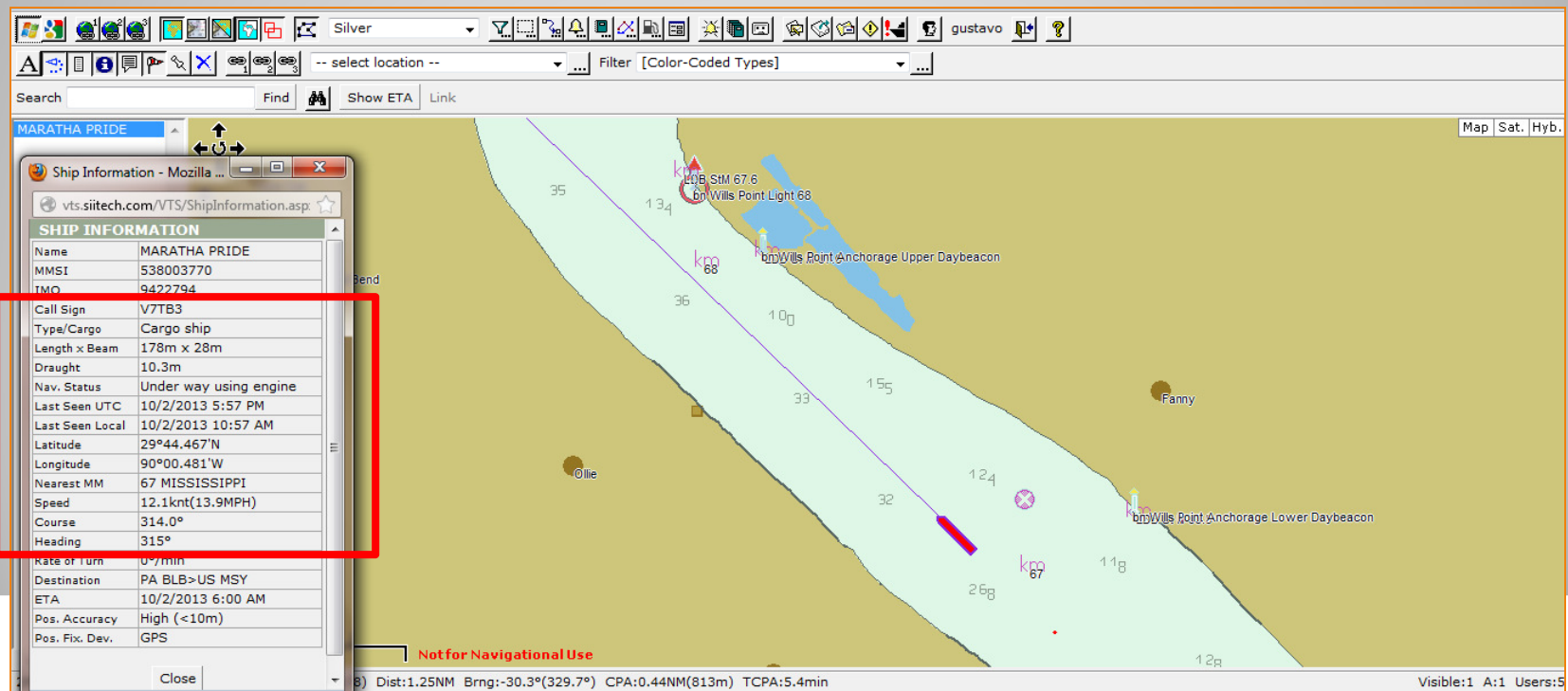
# Combination of data

- Ability to combine spatial data (I-ENCs)
- Raster and vector data



# Additional service

- Application show the speed and course over ground (COG)
- Information from the ship and sounding data

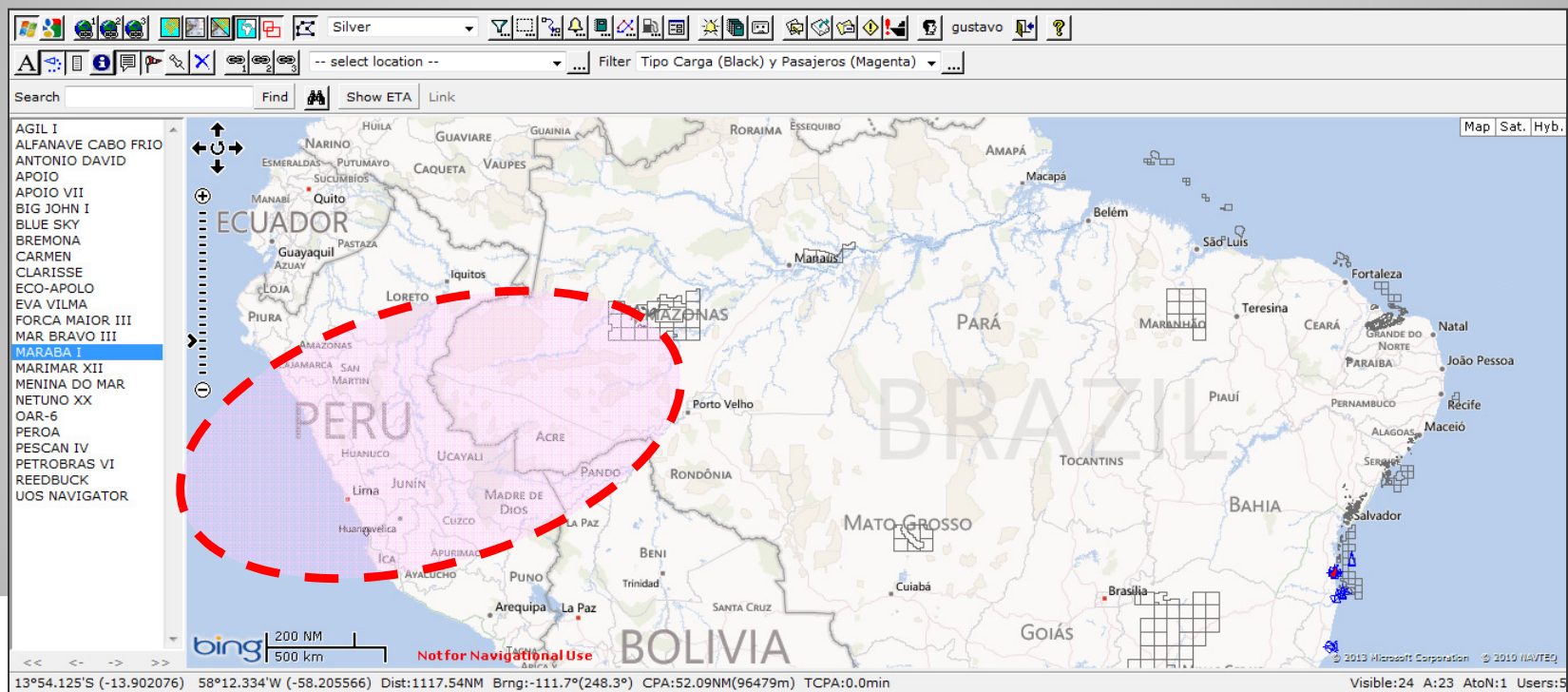


# Peruvian Reality

I-ENC Production

# Impossible

- There is no AIS coverage.
- Has no I-ENC or BSB products available.





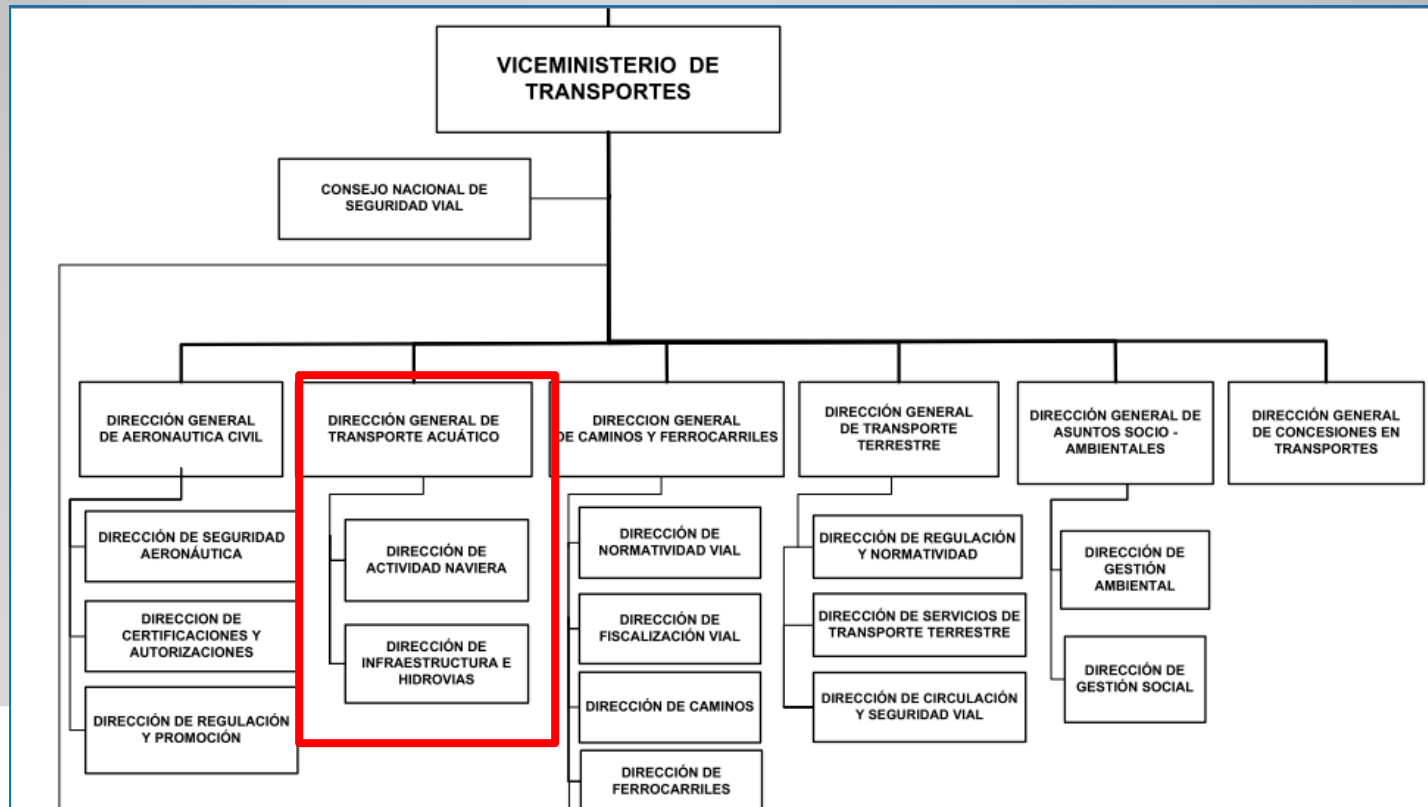
# Peruvian Ministry of Transportation MTC

- Has the responsibility of the Aquatic Transportation and development



# General Directorate Aquatic Transportation

- Image of the structure:



## Current reality in Peru

- The **MTC** has an Aquatic Department in charge of the public and cargo transportation on the Peruvian rivers and has a mapping division.
- The **MTC** developed many tenders & projects since the year 2004 and invested in some particular studies for certain extensions in order to improve and implement the navigational waterways.
- The tenders and projects of the **MTC** did not include the BSB or I-ENC product creation. This only happened in the year 2004 (Voluntary act).
- Most of the finals reports, mention that the Hydrographic office has no funding to start producing and maintaining the I-ENC production.
- The final report only contain recommendations for future plans and developments, but does no encourage the product creation (I-ENC).

# Waterway Projects Proposed in the Peruvian Rivers

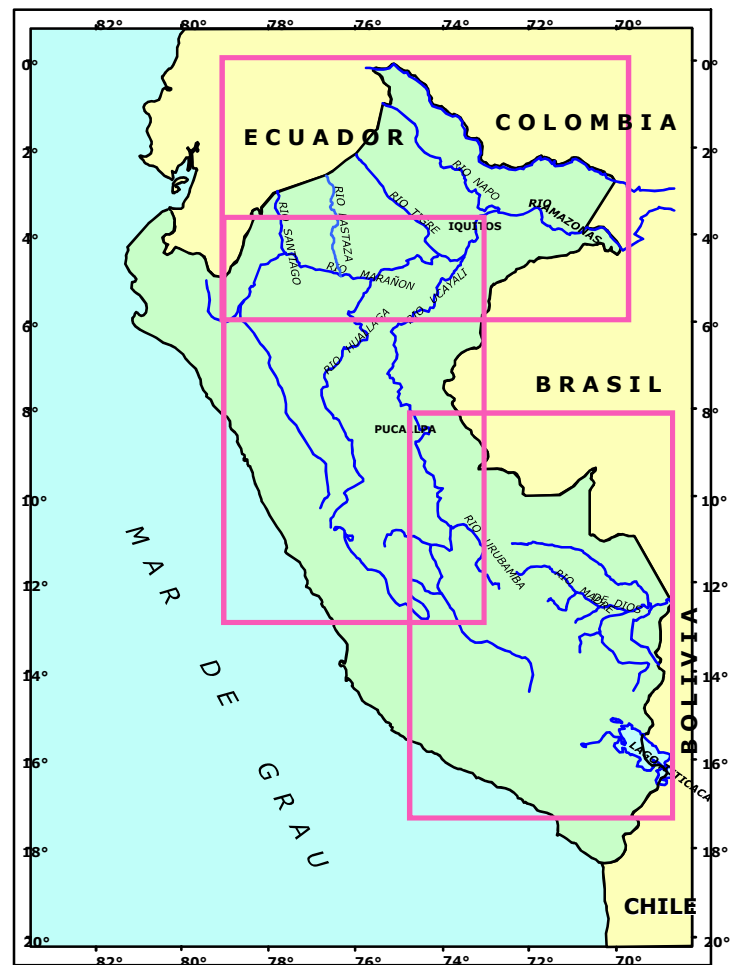
- Peru has identified the following waterways and extensions:

Waterway	From	To	Km.
Napo	Cabo Pantoja	Río Amazonas	564
Putumayo	Güepi	Santa Sofía	1,173
Huallaga	Yurimaguas	Río Marañón	211
Marañón	Saramiriza	Rio Amazonas	632
Ucayali	Pucallpa	Rio Amazonas	1,032
Ucayali	Pucallpa	Atalaya	517
Urubamba	Atalaya	Malvinas	293
Amazonas	Comienzo Amazonas	Santa Rosa	601
M. de Dios	Pto. Maldonado	Frontera	n/d
<b>Total</b>			<b>5.023</b>

- Using as an example the waterway extension of Paraguay-Paraná (3,400 km) that benefit to Argentina, Bolivia, Brasil, Paraguay and Uruguay

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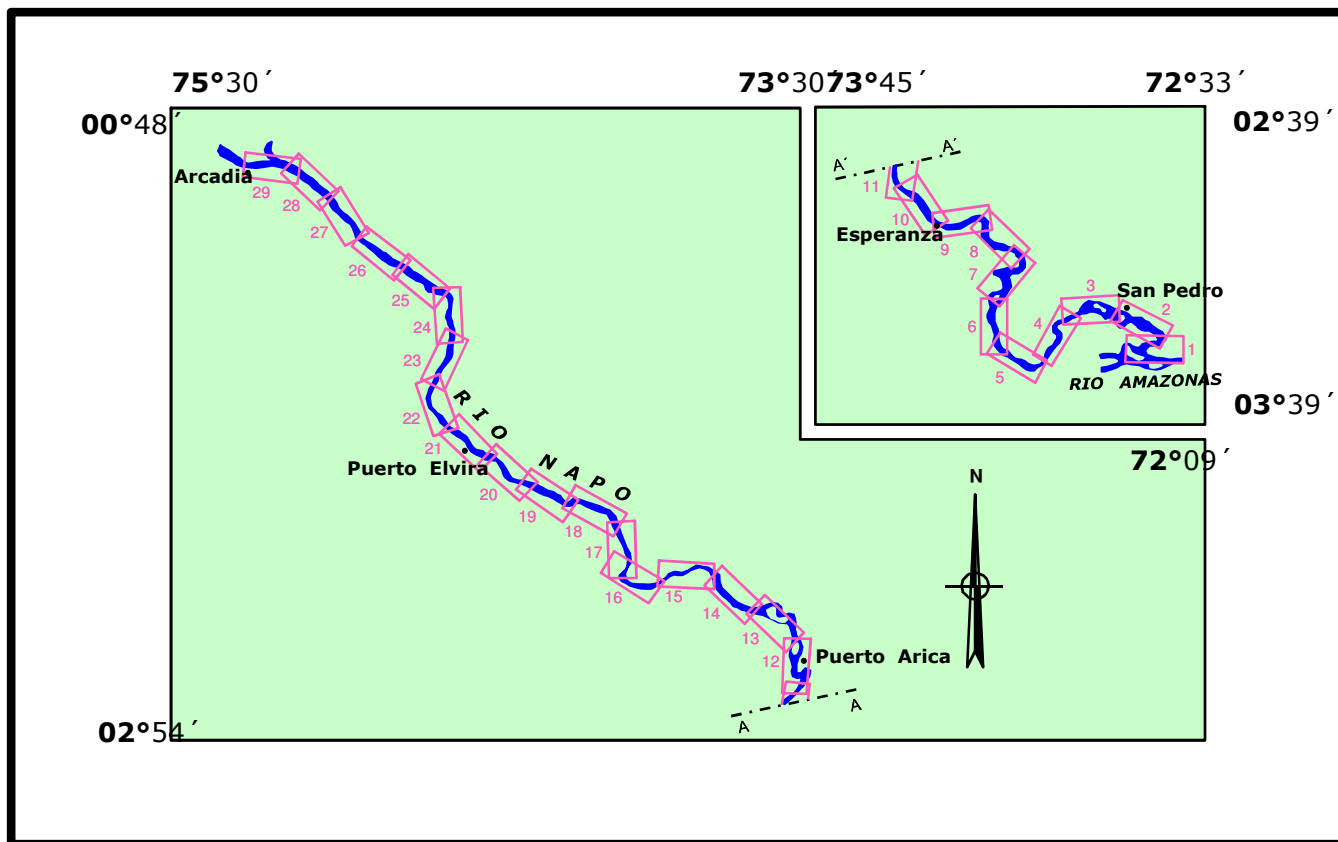
## NAUTICAL CHARTS OF THE AMAZON BASIN





# NAPO RIVER

FARO MARUPA TO ISLA  
ARCADIA



# Ministry of Transportation (MTC)

The new Minister consider the following goals for the upcoming years:

- To improve and maintain the conditions of navigation of the rivers Ucayali, Huallaga, Marañón and Amazonas.
- Design a new waterway that supports barges with dimensions of 16m x 60m and 10 feet draught.
- Improve the navigational rivers with new aids to navigation, canalizations, dredging and other aid or instruments that may be complemented by the Hydrographic office.
- Include the I-ENC development and upgrade his Aquatic department with hardware and software.



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# Conclusions

# QUADRANT-ENC: Purpose of Assisting to IEHG



## PERU:

- We recommend to IEHG to consider and incorporate to the Ministry of Transportation from Peru (MTC) for the upcoming meetings.
- Our company QUADRANT-ENC compromise to coordinate and encourage the **MTC** to assist to future IEHG meetings
- Our company compromise to translate to Spanish language any material the IEHG committee may consider important in order to support to the Latin community and keep them informed.



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# Questions ?

Please, contact us:  
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