

# Inland ENC applications developed by Periskal

- Inland ECDIS Harmonization Group  
Iquitos, Peru, 14-16/11/2012



# Periskal at a glance

- Software company, head office Belgium, sister companies in Serbia, Rumania and Ukraine
- Since 1990, focus on Inland ECDIS systems and RIS technology, 5000 customers in Europe, 32 employees
- Main products/core business:
  - Inland ECDIS Viewer and Periskal Radar Overlay
  - Production of IENCs
  - Software components for River Information Services
  - Hardware components & complete AIS Base Stations networks
- Certified:
  - DNV ISO 9001 -2008
  - DNV ISO 14001
  - Microsoft Silver Partner

# Recent developments in the field of RIS In Europe

- **Shore applications:**

software / hardware / infrastructure

Mainly EU financed or co-financed projects

- **Ship applications:**

Mainly private investments by ship owners

Equipment programs launched by authorities

# Main projects

- **RIS France – VNF**
  - Equipment of Vessels (15 Information Mode and 5 Navigation Mode)
  - Installation of AIS Base station network (12 AIS BS)
  - Setting up and architecture of RIS centre (Web-Based T&T Applications)
- **RISSerbia**
  - Equipment of Vessels (Information Mode and Navigation Mode)
  - Installation of AIS Base station network (15 AIS BS)
  - Setting up and architecture of RIS centre
    - AIS Tracking & tracing software components
    - ERI, International Data Exchange
    - Notice to Skipper
    - DGPS Monitoring
    - Inland ECDIS, D4D, Lock management, Hull Database
- **BuIRIS**
  - Setting up of Web-Based and Client T&T Applications

# Main projects

- **RISING**
  - Development of a Web Based Route Module
  - Development of Lock Planning Application
- **ENC Flanders**
  - Production of IENC of Class IV and upper for the authorities
- **ENC France**
  - Training of the Cartography Department of *Voies Navigables de France* for the production of the official French IENC





# Installation of AIS BS in Serbia



# Installation of AIS BS in Serbia



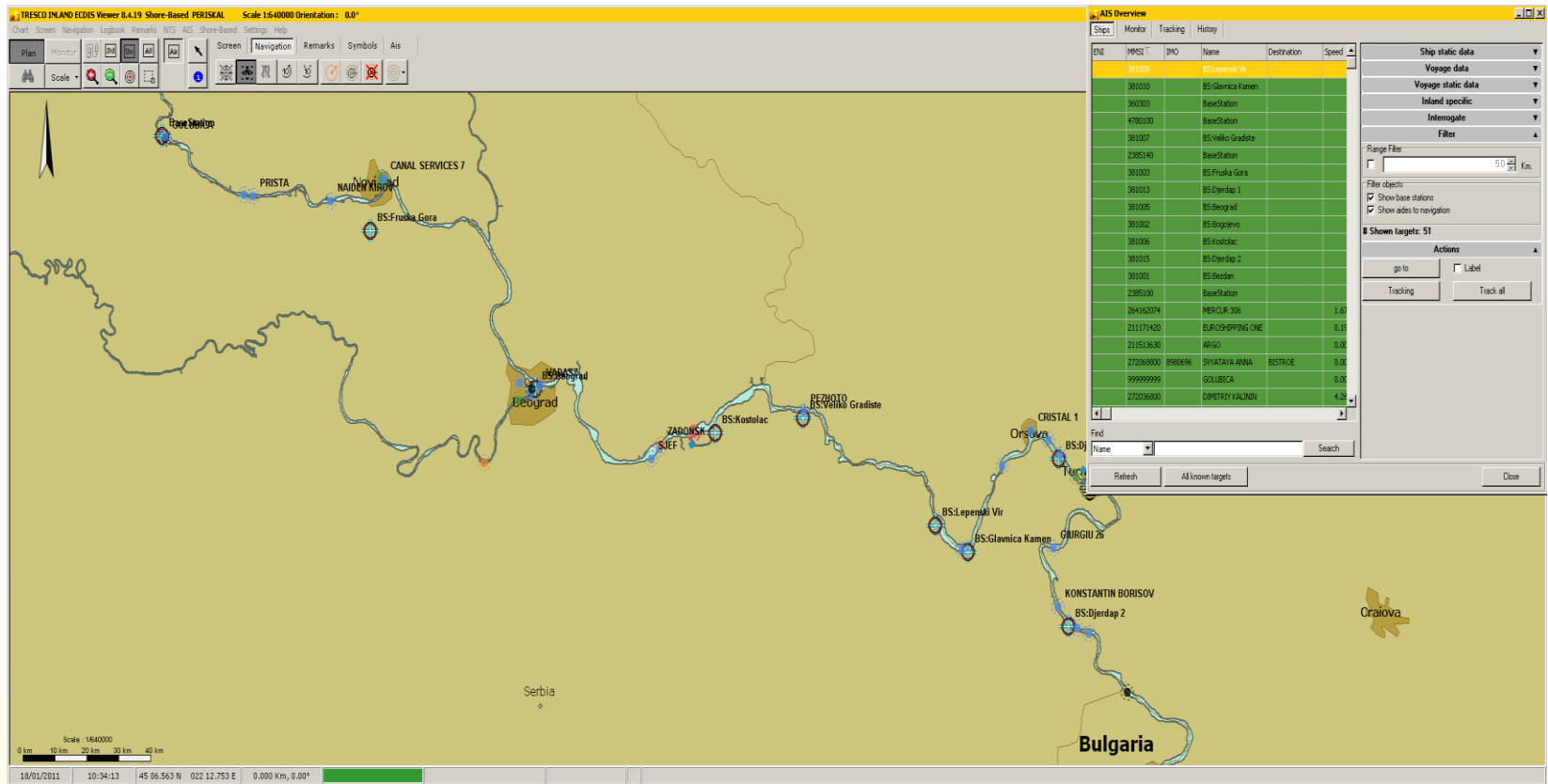


# Installation of AIS BS in Serbia

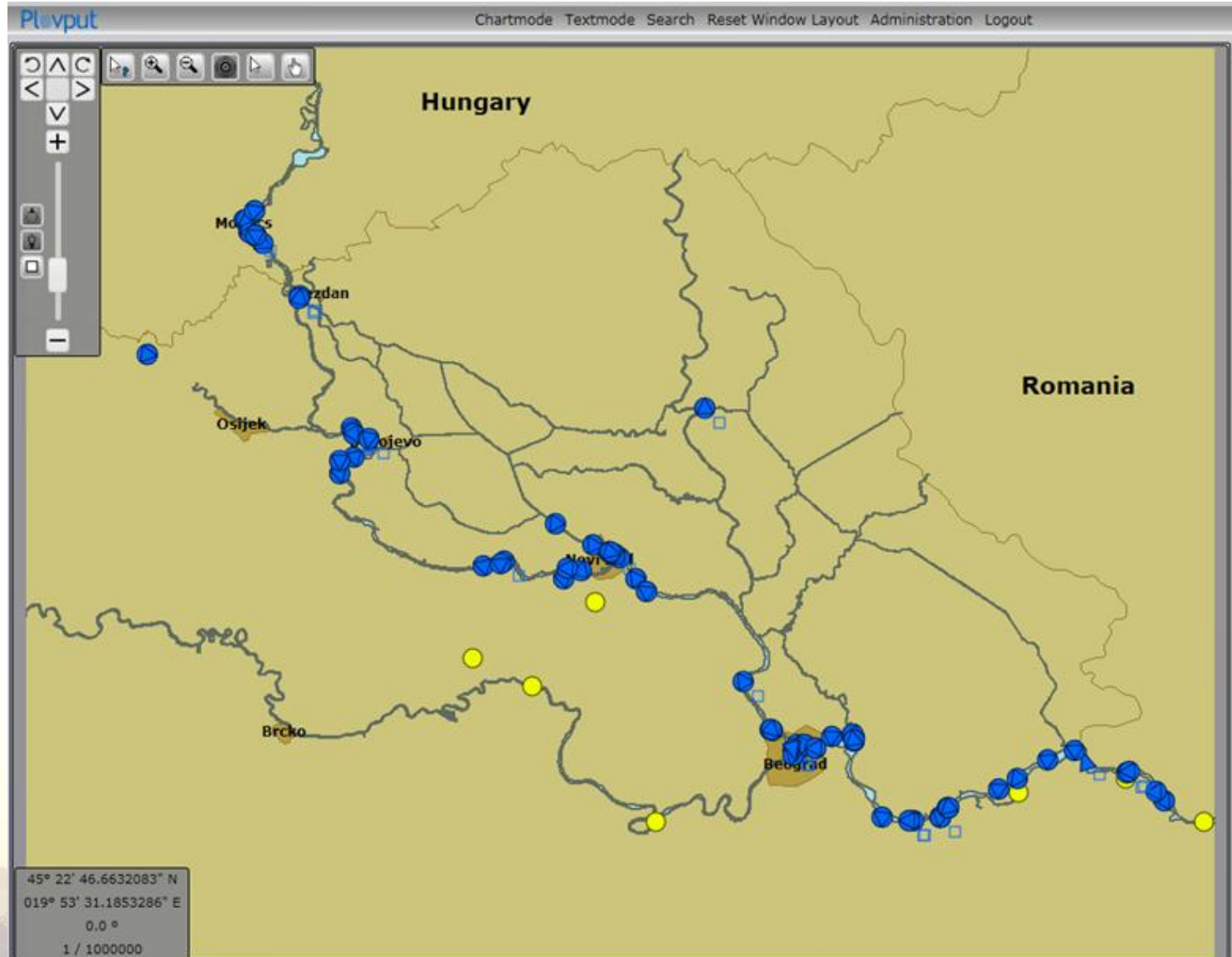




# Inland ECDIS Viewer – Shore Based



# T&T Web Application – Serbia



# T&T Web Application – France

VNF - Mode Carte

Mode Carte Mode Texte Configuration Mise en Page Historique Tickets AIS Administration Se déconnecter

Aperçu 1 2 3

Chercher

Nom MMSI

Carte actuelle

Carte 226004890 ADELIN

Fenêtre Détails

Nom	OURAL
MMSI	226005720
Numéro IMO	N/A
ENI	N/A
Latitude	48° 56' 28,026" N
Longitude	002° 16' 06,216" E
Dimensions	135x11 m
Type de cible	Ship
Type	91
COG	188,1 °
SOG	0,0 kn
Cap	N/A
ROT	N/A
Panneau bleu	0
Dernier Signal	08/11/2012 15:10
Personnel embarqué	255
Passagers	8191
Base MMSI	002268220
Tirant d'eau	N/A

Statut Serveur : 200

Utilisateur tresco

48° 56' 40,7753429" N  
002° 16' 25,3679126" E  
0,0 °  
1 / 10000  
Cibles affichées 16

48° 56' 27,643506 002° 16' 07,17817

Options

les Buchettes le Tronc le Vaucelle BUTTES BALMONT BUTTE VACHON SONGE NANTOS h 21.0 OBSTINE PORT PÉTROLIER h 21.0 Darse N.o 6 Darse N.o 5 Darse N.o 4 Darse N.o 3 Darse N.o 1 PORT DE GENNEVILLIERS MIMI BAYARD PANAMA CONGAY AQL ECLIPSE PORT CHARBONNIER SINAT CRAONA RUBIS ESEVE PORT AGRICOLE Petit Gennevilliers

Zone d'alarme Amfreville-amont  
Vitesse maximale 14,8 kn  
Type d'alarme ENTERING  
Nomination CYCLONE %  
Date & Heure 08/11/2012 15:11



# AIS Network Monitoring Tool

The screenshot shows the Nagios-Vis web interface running in a Windows Internet Explorer browser. The browser address bar shows the URL `http://intranet.periskal.be/nagios/`. The interface includes a left sidebar with navigation menus for General, Nagvis, Monitoring, Reporting, and Configuration. The main area displays a map of France with various locations marked. A pop-up window is open, showing details for the 'hostgroup-StationBase-Cassel'.

**hostgroup-StationBase-Cassel** (Last state refresh: 2011-02-04 13:31:56)

Host Name	State	Output
base-station-cassel2	UP	The Host is UP. There are 1 OK Services.
base-station-cassel	UP	The Host is UP. There are 1 OK Services.
ups-cassel	UP	The Host is UP. There are 3 OK, 1 PENDING S
bac-cassel2	UP	The Host is UP. There are 4 OK Services.
bac-cassel	UP	The Host is UP. There are 4 OK Services.



## LOCK Status

Provides information about the current lock &amp; chamber status

Current lock : **Iron Gate 1**

Select Lock

Iron Gate 1

Lock Status :

**PARTIAL**

Average Passage Time

**00:00:00**

View more averages

### LOCK DETAILS

ISRS ID : **RS0001L1**  
 Lock name : **Iron Gate 1**  
 River : Danube  
 River Km : 942  
 Direction : **DOWNstream**  
 Chambers : **2**



Refresh data

### LOCK CHAMBERS

Chamber #1

**AVAILABLE**

Chamber #2

**PARTIAL**

Chamber #3

N/A

Chamber	Limitation	Description	Start	Duration
IG1 Chamber 1				
IG1 Chamber 2	OBSTRU	Maintenance work on the left chamber wall.	2011-09-01 11:52:53	14



Limitation Code :

Expected End :

Limitation Reason :



# Web Application Route Module


RIS-Rising - EasyVoyagePlanning Page
Routeplanning Logout


Route

Summary

**Departure** BE, ANR, 0129D, 1,7, Antwerpen Container Europa Terminal binnenvaart kade 667-671

**Destination** NL, RTM, 01156, 3, Container terminal Rotterdam, Europahaven

**Total Distance** 127,743 Km

**Total Time** 0d 11:58 **18H** 0d 11:58 **14H** 0d 11:58

*Remark: The average locking times of locks are being used.*

**Largest Possible Vessel** L:175 W:23,5 D:4 H:9,1 **CEMT** CEMTClassVIa [About CEMT Classes](#)

*Remark: The amount of cargo in a ship - in tons - can vary due to the weight and size of the cargo.*

**Number of ships** 1 *Remark: The amount of vessels is a rough estimation. De cargo load of a ship is dependant on the exact shape of the ship, the possible draft, the density of dry and wet cargo, the type of containers etc...*


Filter

☒ City ☒ Lock ☐ Terminals

**Text**

- Antwerpen Container Europa Ter 0 Km
- Kreekraksluizen 15,3 Km
- Dintelsas 33,8 Km
- Volkeraksluizen 3,6 Km
- Willemstad 3,2 Km
- Klundert 5,7 Km
- Puttershoek 20,143 Km
- Goidschalxoord 9,6 Km
- Hartelsluis 11,8 Km
- Rozenburgsesluis 7,8 Km

**Chart**



Print

Ok

# Ships Applications

- Inland ECDIS **Information** Mode
  - *Periskal Inland ECDIS Viewer* used on 5000 commercial vessels
- Inland ECDIS **Navigation** Mode
  - *Periskal Radar Overlay* used on more than 100 commercial vessels

# Inland Ecdis Viewer developments

- Ship Installation programs in Europe
- Development of new messages like convoy messages, lights etc...
- Development of water level messages for water level predictions
- Development of Notice to Skipper webservice
- Routeplanning





# Vessel installations



# Main Features

- *Using latest Inland ECDIS / NTS / VTT and ERI standards*
- *Compatible with AIS*
  - *Display of AIS Data*
  - *Management of AIS Transponders*
- *Route Planning*





# Route Planning

**Manage Route**

Description

[Ship dimensions](#)

Place of destination

Via

**Ship**

Length : 86.0 Meter    Allow sea : ☐

Width : 9.5 Meter    Loaded : ☒

Height : 2.80 Meter    Navigation on sundays ☐

**ETA**

Regime : ☐ 14 h.    ☐ 18 h.    ☒ 24 h.

Departure 08/11/2012 14:01:49    Now

**Speed**

Empty 10.0 kph    Loaded 10.0 kph

**Draft**

Empty 2.50 Meter    Loaded 0.00 Meter

Margin 0.00 Meter    Margin 0.00 Meter

**Pegels**

Type Survey: None

Back    Next    Finish    Cancel

**Voyage plan**

Departure : Antwerpen Willemdok

Destination : GENNEVILLIERS, port Paris

Total Kms : 0.0

Total time : 00:00

Dimensions : Length : 86m, Width : 9.5m, Height : 0m, Depth : 0m

Max. Shipdraught : 2.5 m (Spoorwegbrug Laken , 0.0 m Margin )

Lowest Bridge : 3.5 m. (Passel, pont )

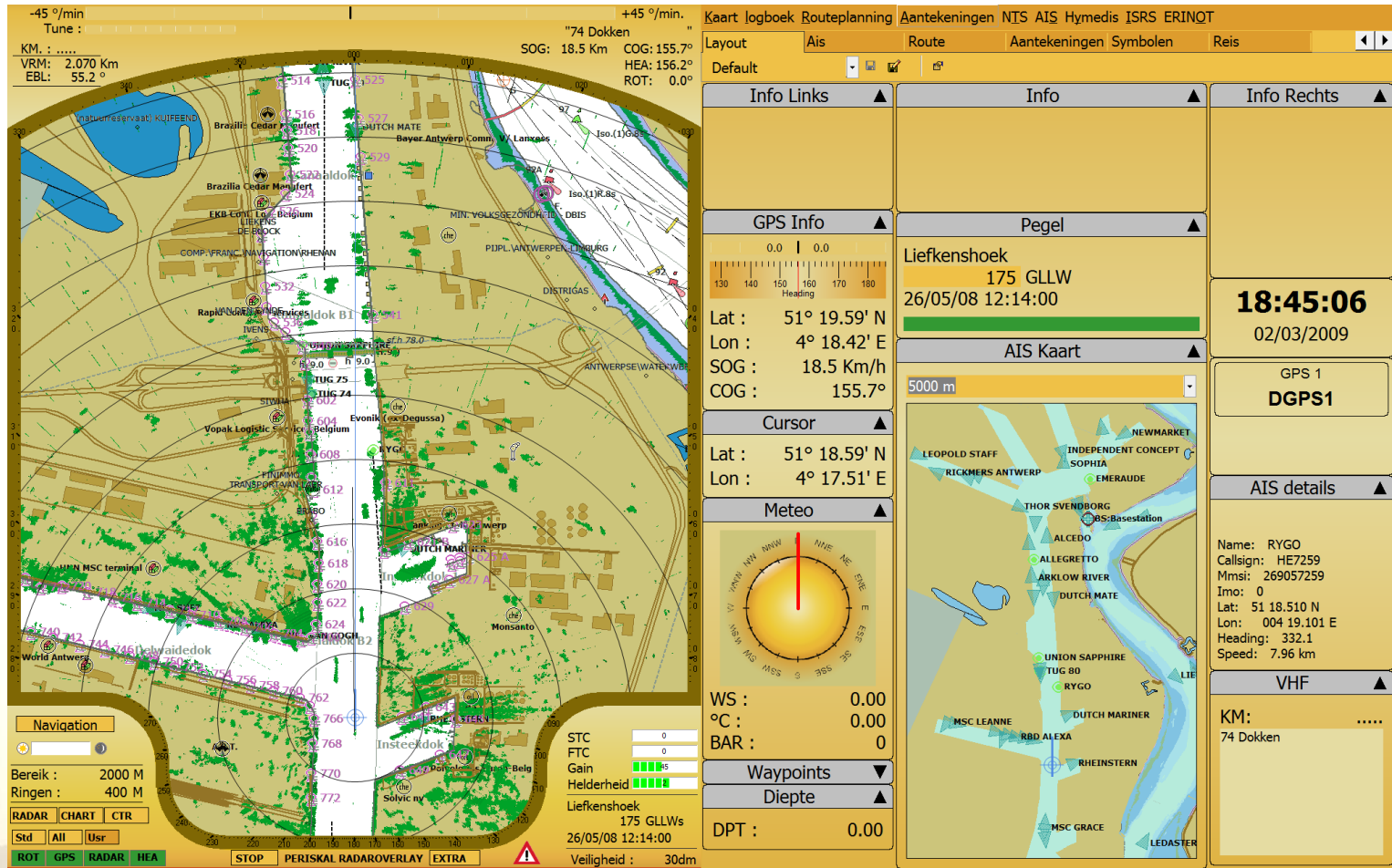
Filter

☒ Bridge ☒ Lock ☒ Junction ☒ VHF ☒ Place ☒ City ☒ Dock ☒ Other

Description | Chart

- + [i] Spoorwegbrug Laken
- + [i] Koninginnelaanbrug
- + [i] Redersbrug
- + [i] Saincteletteplein noordbrug
- + [i] Brug Kasteeltje
- + [i] Brug Vlaamse Poort
- + [i] Molenbeek Sluisbrug 11
- + [i] Molenbeek sluis 11
- + [i] Voetgangersbrug "Reu Gosselies"
- + [i] Godshuizenbrug Ophaalbrug
- + [i] Ropsy Chaudron Verkeersbrug
- + [i] Metrobrug
- + [i] Anderlecht Spoorbrug
- + [i] Cureghembrug
- + [i] Klein eilandbrug
- + [i] Paepsembrug
- + [i] Anderrlecht sluisbrug 10
- + [i] Anderlecht sluis 10
- + [i] Anderlecht Spoorbrug Oostende-Brussel
- + [i] brug Autobaanring
- + [i] Sluisbrug Ruisbroek
- + [i] Sluis 9 Ruisbroek
- + [i] Loopbrug Ruisbroek
- + [i] Burg sluis 8 Lot
- + [i] Sluis 8: Lot
- + [i] Waterloobrug Buizingen
- + [i] Brug over sluis Halle
- + [i] Sluis 7: Halle

# Periskal Radar Overlay



# Periskal Radar Overlay



# Other RIS systems

- Electronic Reporting ERI
- Notice to Skipper
- Hull Database
- Lock Management System
- dGPS Monitoring System
- IALA DGPS system
- Inland ECDIS chart production and advice



# Thank you for your attention

## Gaël Billet - Periskal Group

[www.periskal.com](http://www.periskal.com)

[g.billet@periskal.com](mailto:g.billet@periskal.com)



Inland ENC applications developed by Periskal  
Iquitos, Peru, 14-16/11/2012

