

High level infrastructure and logistics services planning - are marine insurers doing their job?

Ms Isa Cano

Senior Manager,

ALG Transportation Infrastructure & Logistics, Barcelona



Traditionally, high level **infrastructure** planning has been conducted by Governments



- Insurance and reinsurance companies participate in all links in the infrastructure development process, except the **planning phase**
- Precisely in this planning phase the key decisions on the project are taken
- Being familiar with the planning (of infrastructures) makes it possible to anticipate how a given market (of services) will evolve

Types of PPP (Project Financing)

- BOT: build, operate, transfer
- DBOT: design, build, operate, transfer
- BOOT: build, own, operate, transfer
- DBFOT: design, build, finance, operate, transfer
- Etc.





Road system



Railways



Waterways



Ports



Airports



**Logistic
Platforms**



Different levels of impacts and risks

During recent years, Governments have also been involved in logistics services planning

Example: What can logistics do for Peru?

Improve the competitiveness of exports

Logistics **reduces** the cost of exports, and can **expand** its services to cover third countries

Strengthen the country's brand at international level

Logistics could **improve** Peru's position as a destination for **investment**, associated with the **efficiency** of its production and services

Create specialised employment

Logistics creates **net, stable employment**; job **specialisation** and favours **employment stability**

Contribute to regional development

Logistics **attract investments**, opens **new opportunities for connections**, creates **employment** and **avoids rural-urban migration**, increasing producers' **margins**

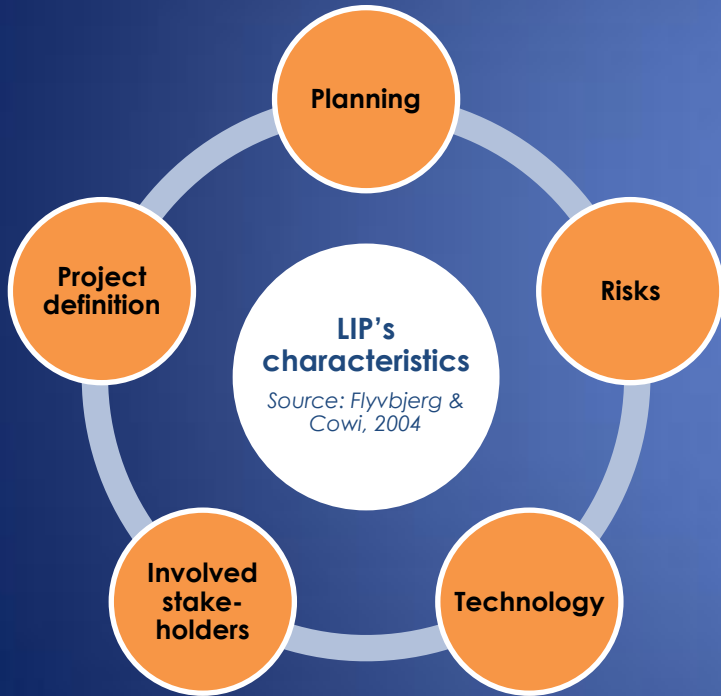
Reduce the cost to the consumer

Logistics **reduces distribution costs** at national and urban levels, and can **favour the growth** of locally specialised SMEs

- Multiple experiences in Latin America
- Result: proposals involving insurance are not generally found, eg:
 - Pilot insurance programmes to involve certain agricultural SMEs
 - Incentives via microinsurance to formalise transport, etc.)



These infrastructure “megaprojects” present common problems:



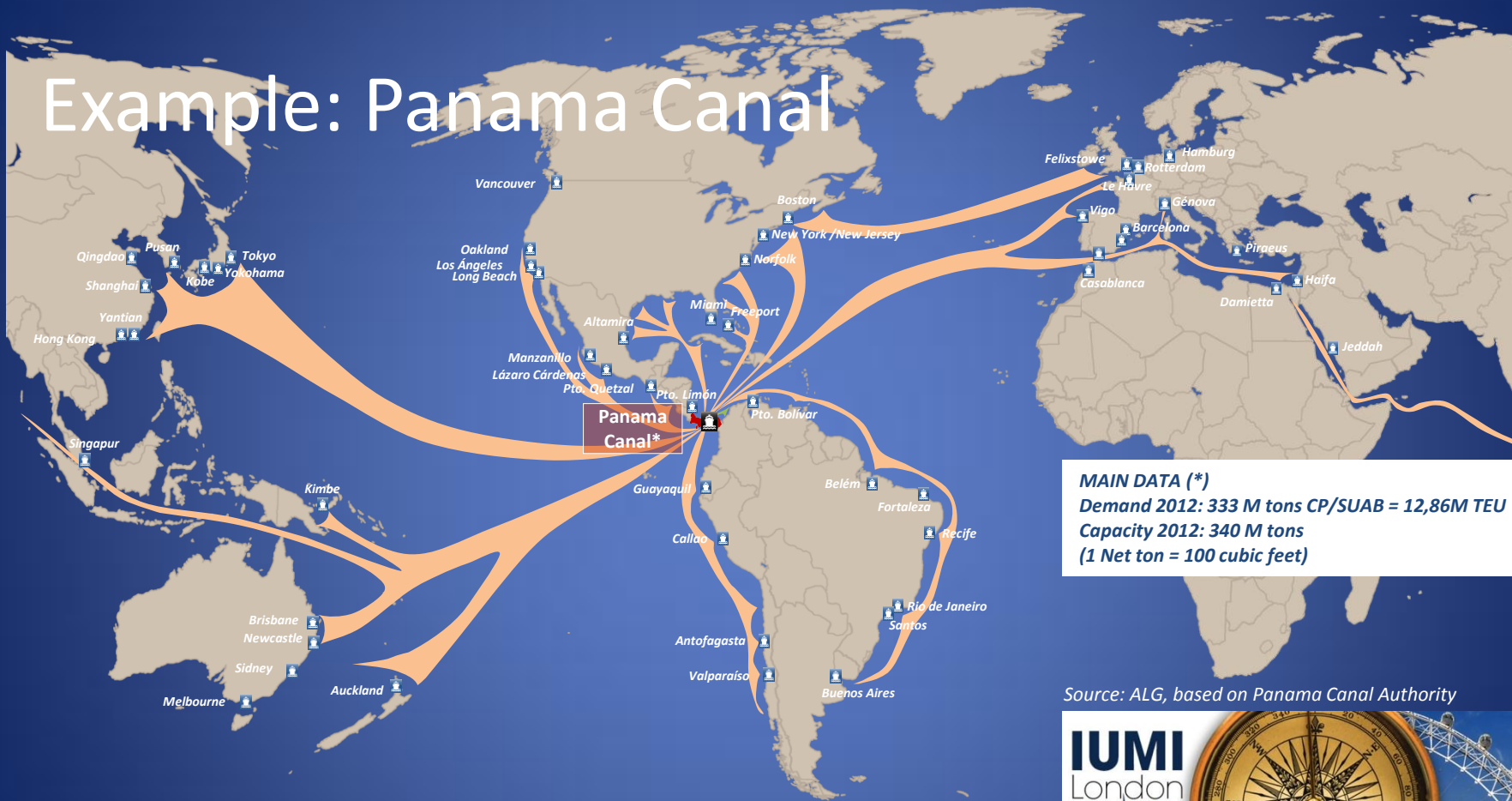
Cost estimation*	<ul style="list-style-type: none"> • In 9 out of 10 projects, the costs were underestimated in the planning phase • Average cost overrun on rail projects: 44.7% • Average cost overrun on road projects: 20%
Demand forecasts**	<ul style="list-style-type: none"> • 90% of rail projects overestimated the demand with an average overestimate of 106% • In more than 50% of highway projects the real demand differed by $\pm 20\%$ from the estimate
Funding schemes	<ul style="list-style-type: none"> • Experience (multiple types of PPP, there is no evidence of better results if the private sector is responsible for the planning – but there are better results in construction and operation) • Risk associated with the transport demand, very elastic • Dependence on the overall economic context, not controllable by any of the parties • Conflicts of interest between public and private • Private sector contracting: results-oriented
Environmental impact	<ul style="list-style-type: none"> • Lack of knowledge of the real environmental risks of these types of project • Lack of precision in estimates • Inadequate organisation, planning & institutional integration for the evaluation process

LIP = Large Infrastructure Project

* Database prepared by Flyvbjerg et al.(2002), 250 LIPs

** Database prepared by Flyvbjerg et al.(2005), 210 LIPs

Example: Panama Canal



MAIN DATA (*)
 Demand 2012: 333 M tons CP/SUAB = 12,86M TEU
 Capacity 2012: 340 M tons
 (1 Net ton = 100 cubic feet)

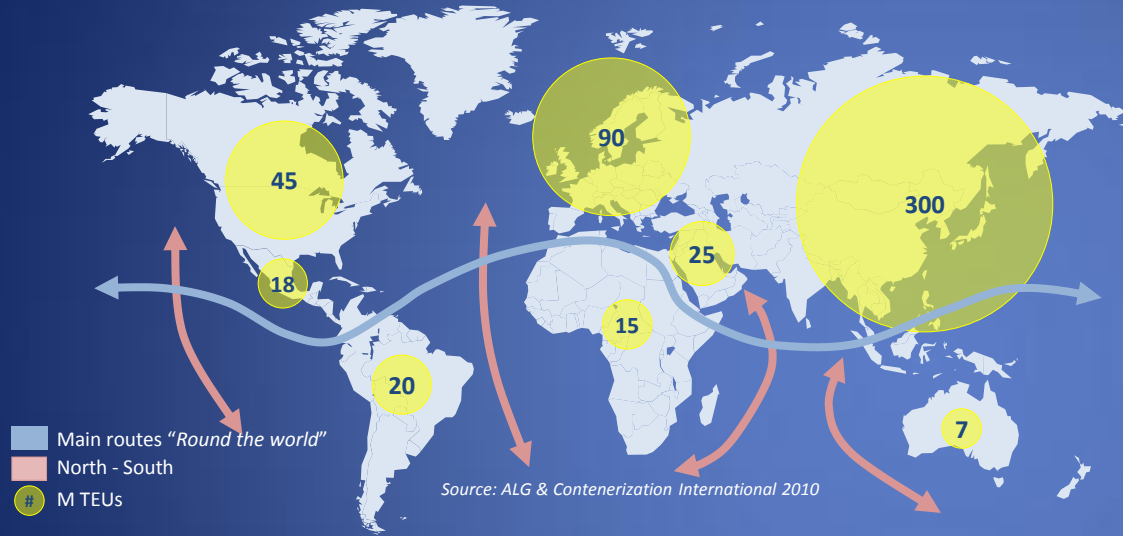
Source: ALG, based on Panama Canal Authority



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Main container routes



- Main transshipment ports in Caribbean Region: Panama Ports, Cartagena (Colombia), Kingston (Jamaica)
- Transshipment in Panamá: vessels to arrive 1 day early during which time containers which do not pass the canal can be offloaded and transferred to other routes
- Total turnover in Panamanian ports 6.63 million TEUs en 2012 of **which 86% were transhipped to other vessels**

Main routes

- The main routes can be grouped into three main corridors: **Transpacific, Transatlantic and Europe-Asia**
- Mainly attended by global “ship builders / owners” that operate the so-called routes “Round the world”
- These routes are made by high capacity vessels (> 5.000 TEU), with few port calls

North-South

- North-South routes connect the main routes with final markets
- These routes are operated by regional “ship builders / owners” or shipping lines from a bigger alliance
- The ship builders / owners offer end-to-end services, connecting hub regional ports with local ports

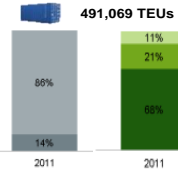
Regional

- Regional routes operate specialized markets, such as South American dorsal
- The ship builders / owners offer end-to-end services, connecting local destinations
- These routes are mainly operated by regional ship builders / owners

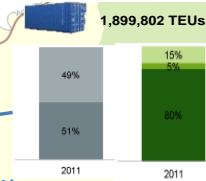


Logistics facilities at the Panama Canal

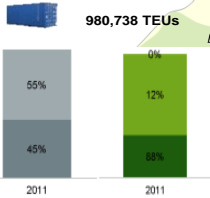
Colon Container Terminal



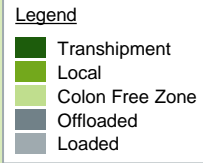
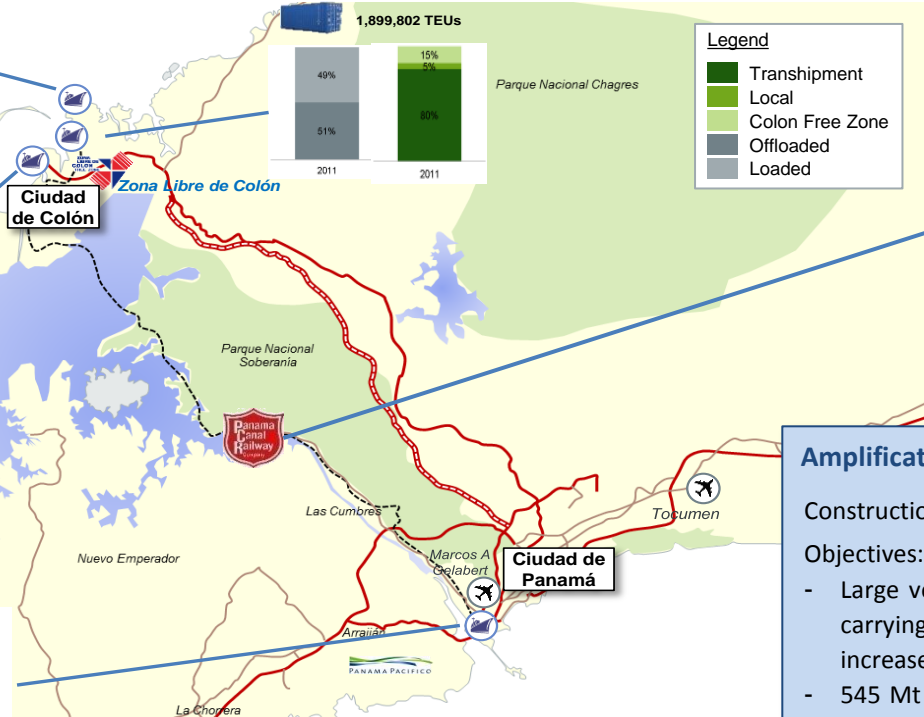
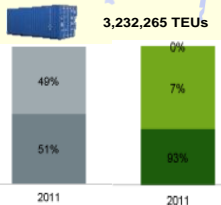
Manzanillo Int. Terminal



Panamá Port Cristóbal



Panamá Ports Balboa



Panama Canal Railway (KCS)

- Activities started in 2001
- 76 km of unique railway, considered a primary custom zone
- Transhipment of containers between ports
- Movement 2011: approx 700.000 TEUs

Amplification Programme

Construction of a 3rd set of locks.

Objectives:

- Large vessels: 49 m width, 366 m length, 18,3 draft and carrying capacity of 12,000 TEU or 170,000 dwt (+ 40% increase in capacity)
- 545 Mt CP/SUAB of capacity of the water way compared to 321 Mt at present

Investment: 5,250 M USD

Example: Nicaragua Canal



Project Grand Canal

- Contractor and Operator: HK Nicaragua Canal Development Investment (HKND)
- Start of Concession: june 2013 for 50 years (+50 negotiable)
- Start of the work: 2014. Estimated duration: 11 years
- Estimated capacity: 4.5% of the world maritime traffic
- Design studies: 4 possible routes with several alternatives per route
- Progress of the feasibility study and finances unknown

Investment ≈ 40,000 M USD

Weak points:

- Financial conditions
- Expected demand – Analysis of the socio-economical feasibility
- Environmental Issues

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Some **questions** for you

- The 3 options mean the same level of risk?
- Are insurers and reinsurers able to appreciate and measure these different levels of risk?
- Could one option remain not-feasible during its operational phase because competitive covers cannot be obtained?



Stakeholders involved in high level planning



Ministries and other government levels



Trade associations for carriers, manufacturers, exporters, retailers, etc.



**Technical teams
(Consultants, Engineers, Universities, etc.)**



Potential operators, construction companies, equipment and technology sellers, etc.

In general, low presence of insurers' and reinsurers' associations (Colombia is an exception)

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Could marine insurers play a **more effective role** in high level infrastructure planning?

- Greater knowledge of what is happening in the planning phase (What's coming in the near future?)
- The rest of the stakeholders, especially Governments, also need to know the critical decision-making variables of insurers
- Vector in the factor insurance into the logistics chains cost evaluation (evaluation and selection of projects involves the WITH/WITHOUT project comparison)
- Lobby in order to take part in decision-taking (greater visibility)



THANK YOU! QUESTIONS?

Isa Cano

Senior Manager - ALG

icano@alg-global.com

+34 610 29 64 64

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