

Welcome



Contract Management for Dredging and Maritime Construction

Day Chairman

Dr Marc Gramberger, Prospex bvba



Contract Management for Dredging and Maritime Construction

Tender Procedures

An analysis with some comments
from the point of view of a
Europe based dredging contractor

Luc Imbrechts

1. Scope

- Construction & other contracts (cf. Gatt)
- Tender procedures v. direct purchase

2. Alterations

- Alterations, amendments, modifications, deviations, reservations, omissions, etc. ?
 - ☞ No in principle
 - ☞ But may be necessary
 - Specifications not compatible w/ industry practice
 - Contingencies
- Pre-tender Q&A

3. Purposes of Tender Procedures

Maximize competition

4. Contra's of Tender Procedures

(-) Lack of :

- Elements of dynamism
- Flexibility

5. Pro's of Tender Procedures

(+) Especially for client, his financiers (& public in general)

- Value for money
- Efficiency
- Cost management
- Quality maintenance
- Expediency

(+) Especially for bidders

- Transparency

6. International Standards

- Not one code but tendency to uniformity
- Miscellaneous international institutions
 - Uncitral, Gatt & other international lending institutions
 - World Bank & EBRD
 - * *Standard Bidding/Tender Documents – Procurement of Works*
 - * *Standard Procurement Documents – Prequalification Document for Procurement and User's Guide*
 - European Union

7. Principles governing “best practices” tender procedures

7.1 Adequate advertising of projects

- Announcements : comprehensive & complete
- Media : appropriate
 - hard copy : min. 1 nat'l newspaper & 1 specialized magazine
 - electronic : UNDB, dgMarket, OJ, e.a.

7.2 Objective (minimum) criteria for participation

- Purpose of Qualification
- Separate from Bid evaluation
- No point system

Issue : Client interference

- Prequalification v postqualification
- Criteria: in function of the Project: not unrelated

Criteria re : Professional & technical ability

Experience & satisfactory past performance on similar projects

Issue: Litigation history

- Ability to handle full scope (D&B)

Issues: non completed projects & local experience

- Satisfactory Quality Assurance & Safety Performance
- Quality of Personnel : in each discipline
- Demonstrated understanding & affinity with type of contract

Criteria re : Economic & financial standing

7.2 Objective (minimum) criteria for participation – cont'd

- Timing of Criteria Compliance
- Indirect Criteria Compliance
- Mandatory use of published evaluation methods etc

7.3 Clear, comprehensive, complete and consistent Specifications

- Works requirements & conditions of contract
 - Aim : permit responsive bids
 - Standardization (World Bank)
- Procurement procedure & relevant requirements, etc.
 - Essential aspects (only)
- Client's source of funds

7.4 Full pre-disclosure & fixed objective bid & (in the event) alternative bid evaluation criteria

- Price (only?)
- Other criteria
 - E.g.
 - ☞ payment schedule
 - ☞ delivery time
 - ☞ availability of service
 - ☞ environmental or ecological benefits or impact
 - Mandatory pre-disclosure
 - Verifiable & indeed verified criteria (not necessarily effective?)

7.5 Independent & objective Evaluation + constant interpretation

- Mandatory quantification in monetary terms (World Bank)
- Weighting (EC)

Issue : weighting post-tender subcriteria

- Points/ranking system
- Two Envelope system

Issue: World Bank position

7.6 Contract award (automatic) to lowest evaluated Bidder

Principle : no second round

7.7 Prohibition any form of conduct with discriminatory effect

- ☞ Eligibility restrictions / margins of preference based on nationality, etc. = countless number of techniques
- ☞ Limitation number of bidders

Issue : EC position

- ☞ Particular bidder situations

- Conflict of interest

Issue : World Bank position turnkey & build

- Subcontractors
 - Government owned & subsidized entities

☞ Inadequate bidding preparation term

☞ Unnecessarily large scope of works

issue: management contractors v prime contractors

issue: joint & several liability

☞ Language

☞ Currency

☞ Taxes & customs

8. Patere Legem quam ipse fecisti

- The contractual nature of the bidding documents
- Warranty on owner provided documentation
- Qualified, professional & sufficient client staff
- Alternative bids : only allowed if expressly advertised

9. The Bid Submittal

- Methods
 - Sealed (!) envelopes
 - Electronic bidding
- Late bids

10. Bid opening, examination & award

- Timing opening after bid
- Tender validity period
 - Normal length
 - Contractors' concerns
- Extension of tender validity period
 - Expressly advised option
 - As long as strictly required
 - Permissibility of bid changes

- Confidentiality
 - Evaluation procedure
 - Intellectual property rights
- Award
 - Substantially responsive bids only (?) : definition
 - Non-compliant tenders
- Reimbursement of tender expenses



Infrastructure Finance & Advisory

Contract Management for Dredging and Maritime Construction

Project Finance: The importance of the F word

Michael Dinham – Managing Director, Infrastructure Finance & Advisory

13 October 2006

Unknown unknowns...



“... as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns – the ones we don't know we don't know.”

*Donald Rumsfeld
US Secretary of Defence
12 February 2002*

Agenda

What exactly do bankers do?

**What key features ensure
bankability?**

What should you avoid?

Summary



The markets are very liquid for the right kind of asset



Financier needs are reasonably clear and there are few excuses for ignorance



Weakness in any one area of the project can jeopardise the whole

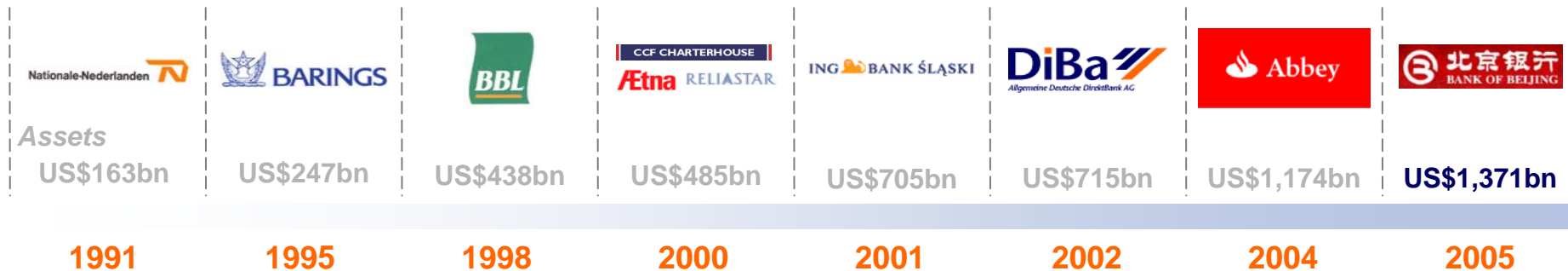
A project which is not bankable is not really a project at all

Who are these bankers?

ING Group

Insurance	Asset Management
Retail Financial Services	Wholesale Banking

- 65 countries
- 120,000 employees
- One of the world's largest financial institutions



Who are these bankers?

- ▶ USD 166 billion project finance debt raised in 2005 from..
 - Syndicated Loan market
 - Universe includes > 500 banks willing to finance projects
 - Market divides geographically between time zones (Asia, Europe, Americas)
 - Institutional loan market
 - Insurance companies and pension funds
 - Other financiers
 - Monolines
 - Rating agencies

What do they do? Soup to Nuts

Sector approach – advisory and financing at all stages in a project's life cycle

Preliminary stages	Pre-qualification process	Bidding stage	Preferred bidder	Financial Close	Refinancing/ strategic advice
<ul style="list-style-type: none"> Financial feasibility and bankability assessment Development of payment mechanisms and performance criteria Public Sector Comparators Identify sources of debt and equity funding 	<ul style="list-style-type: none"> Advice on consortium formation & bid strategy Advice on due diligence appointments Presentation of initial financing plan 	<ul style="list-style-type: none"> Financial modelling/analysis Finalising legal structure and risk allocation Structuring senior debt, sub debt and equity Preparation of information Memorandum – solicit term sheets 	<ul style="list-style-type: none"> Support negotiation on concession, construction and O&M contracts - Co-ordinate finalisation of loan and security documentation Support and co-ordinate closing process 		<ul style="list-style-type: none"> Financial modelling & valuation Advice on capital restructuring and re-financing

Agenda

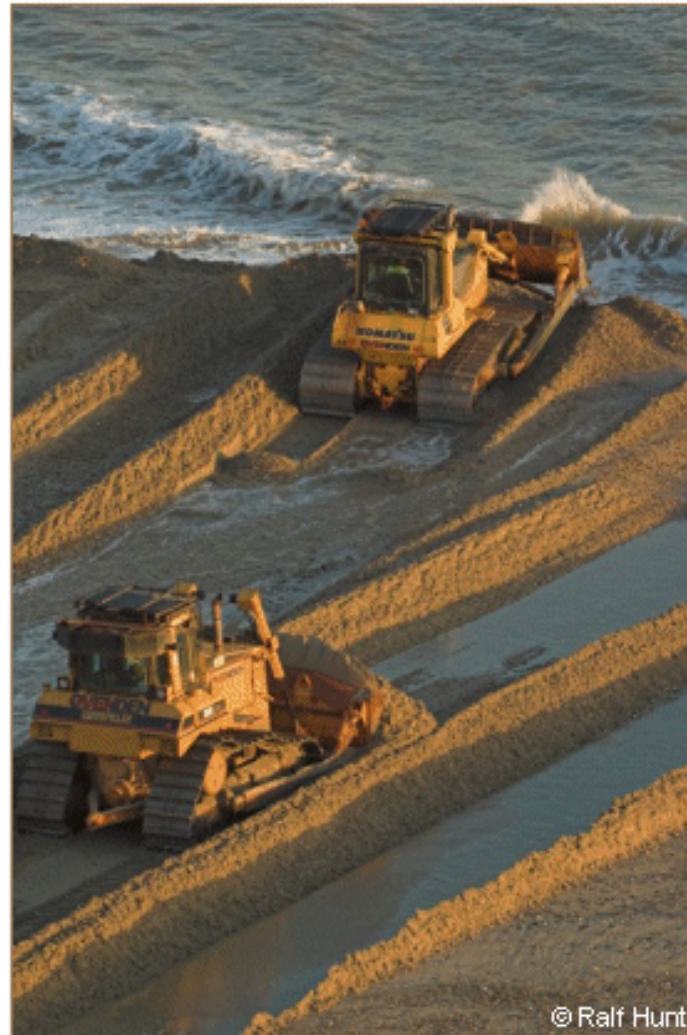
What exactly do bankers do?

**What key features ensure
bankability?**

What should you avoid?

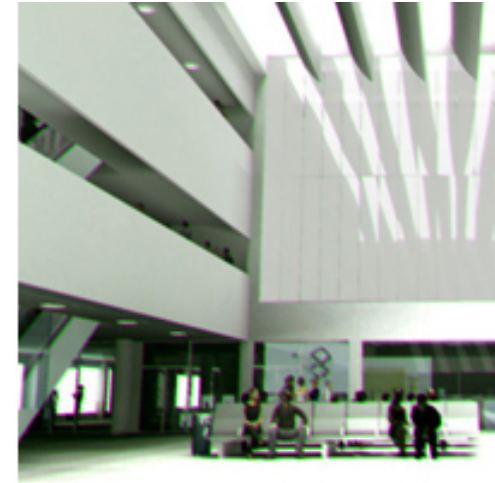
How do bankers look at projects?

1.6m tonnes of sand are dredged from Poole harbour and used to improve beaches including Bournemouth



What does a bank look for in a PPP Project?

- Equator Principles
- Strong political support and commitment
- Good public sector decision making process
- Sensible procurement process
- Acceptable level of risk
- Standard risk allocation and documentation
- English language preferred
- Minimum size threshold
- Good quality sponsor(s) and contractors



The Equator Principles

Adopted by ING and most leading project finance banks

- Projects have to be ‘developed in a manner that is socially responsible and reflect sound environmental management practices’
- All projects that have a material adverse environmental impact
 - must have an environmental assessment done
 - must comply with minimum environmental standards
 - must comply with an environmental management plan



Public sector support

- Government support essential
 - personal support from Minister
 - Finance Ministry must be in favour
- Cross-party support preferred
- Clear negotiating mandate to Project team with adequate delegated authority
- Ready access to ultimate decision maker (Minister/Department Head)
- Project team needs strong leader and commercial experience

Procurement process

- Selection must be transparent and based on sensible criteria
 - pass/fail where criteria subjective
 - ranking based on objective criteria
- No onerous conditions
 - bonds/sureties, if required, must be proportionate
 - limited recourse structure must be recognised
 - late stage funding competitions de-motivate banks
- Timetable must be adequate and, ideally, kept to
 - can still be rapid: 12-15 months
- Project and tender documents must be well developed

Level of risk

- Banks like bearing project risk
 - that is how we earn our money!
- But there are limits...
 - banks have no upside
 - interest margins often less than 1.00% p.a.



Standard risk allocation and documentation

- The UK model is widely used, at least as a guide to risk allocation
 - familiar, so shortens negotiations
- There should be no significant deviations that favour the public sector
 - but no need to be cautious
- Banks will accept usage/market risk, but at a cost
- Payment mechanisms should not be overly complex
- Documentation in English, as international language of business

Project size

- Banks' work does not increase much for bigger projects
- Minimum threshold of c.EUR50m to be economic
- Threshold can be lower where there is a sizable programme of similar projects
- No need for caution in early projects
 - very substantial amounts can be raised for good projects, even in new markets

Private sector sponsors and contractors

- Sponsors bear much project risk through sub-contracts and equity finance
 - need to be creditworthy - credit standing affects finance terms
 - long term commitment preferred
- EPC contractor must (nearly) always provide “turn-key” contract with
 - LDs covering delay and sub-standard performance in every case
 - liability cap sized depending upon complexity of job
 - shareholder and contractor role creates desired conflict
- Banking relationships are important, and affect finance terms

Banks are bidding aggressively for good projects

- In strong Investment Grade countries
- Interest margins down well below 1.00% per annum
- Tenors out to 30 years
- 'Tails' down to 12 months
- Debt service cover ratios down to 1.15:1
- Debt:equity ratios above 90:10

For non-investment grade countries


Banks are concerned on several fronts

- Political Risk – convertibility, transferability, expropriation, obfuscation
- Payment Risk – creditworthiness of grantor
- These can be mitigated, at a price, by insurance, multi-lateral involvement or ECA cover although naturally the cost of this rises with the risk
- It is rare but not impossible for a project rating to break through the country rating

Summary



The markets are very liquid for the right kind of asset



Financier needs are reasonably clear and there are few excuses for ignorance



Weakness in any one area of the project can jeopardise the whole

A project which is not bankable is not really a project at all



W H O L E S A L E B A N K I N G

INTRODUCTION TO PROFESSIONAL INDEMNITY INSURANCE

By Victoria Hughes FICS

13th October, 2006

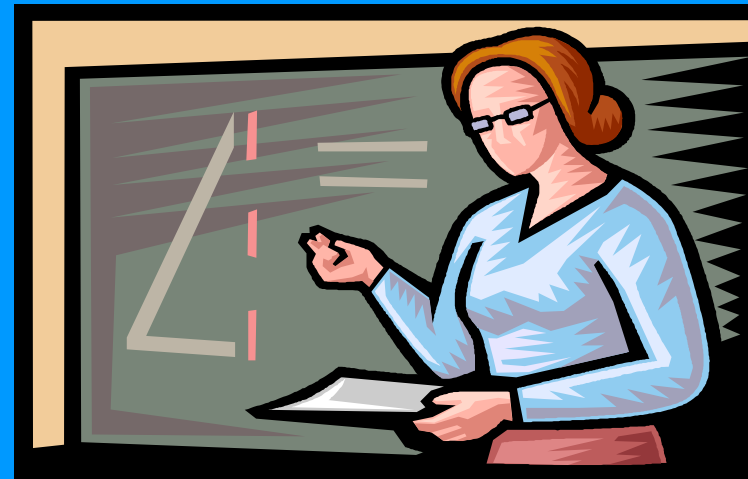
Professional Indemnity Insurance

What is it and why do you need it?

Mind your “P”s and “I”s!

If you only learn one thing in this tutorial...

- P&I = Protection & Indemnity, insurance bought by ship owners
- PI = Professional Indemnity, insurance bought by other professionals such as shipbrokers, surveyors, vessel managers, naval architects, marine consultants etc.





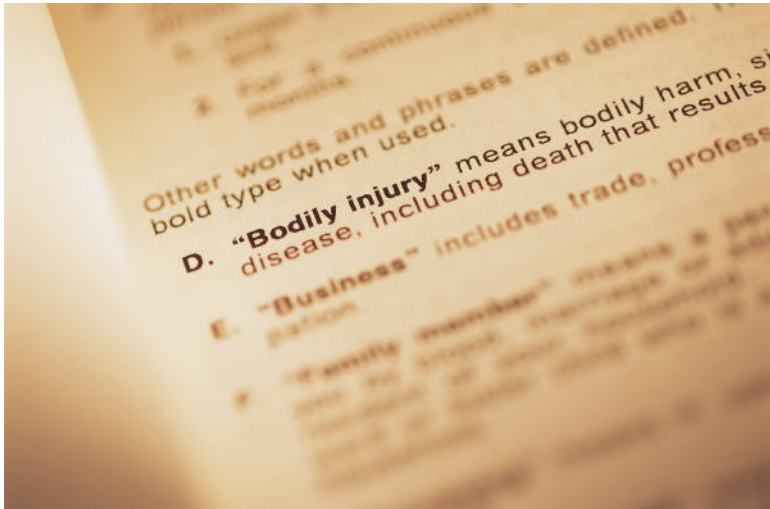
GALATEA
UNDERWRITING AGENCIES LTD

Legal requirement

Duty of care – this is a requirement that a person act towards others and the public with watchfulness, attention, caution and prudence that a reasonable person in the circumstances would. If a person's actions do not meet this duty of care, then the action is considered negligent.



Elements of PI coverage



- Negligent performance of insured services
- Fraud of employees
- Libel & slander
- Unintentional breach of warranty of authority
- Third party liability
- Defence cover

Summary

PI essentially covers errors and omissions claims, but policies may include certain extensions to cover.

Carrying PI insurance may be a requirement of your appointment.

Discuss your contractual obligations with PI underwriters to ensure adequate protection and helpful input.

Be mindful of contractual guarantees



THANK YOU FOR LISTENING

Edward Corbett

FIDIC D&R Working Group



Contract Management for Dredging and Maritime Construction

CONTRACT MANAGEMENT FOR DREDGING & MARITIME CONSTRUCTION



- **CONTRACT ADMINISTRATION**
- **WHY KEEP RECORDS AND GIVE NOTICES**
- **DREDGING & MARINE WORKS** - **RISK INDUSTRY**
- **COMMERCIAL RISKS** - **TIME**
 - - **COST**
 -
 -

ALLOCATION OF COMMERCIAL RISK DEPENDS ON FORM OF CONTRACT

- ICE 6TH & 7TH
 - NEC ECC
 -
 - FIDIC 'RED' BOOK
 - FIDIC 'BLUE' BOOK
- } RISK SHARING
- FIDIC 'ORANGE' & 'YELLOW' – CONTRACTOR TAKES MORE RISK
 - FIDIC 'SILVER' BOOK – CONTRACTOR TAKES EVEN MORE RISK

MANAGING COMMERCIAL RISK

- DO THE PARTIES RELY ON GOOD WILL TO DEAL WITH
 - TIME AND COST ISSUES
 - OR
 - DO THEY OBSERVE THE PROVISIONS OF THE CONTRACT
-
- IADC “USERS” GUIDE TO FIDIC CONDITIONS
 - *“It is now more important than ever that the users and especially site representatives should acquire a profound knowledge of the Conditions and consequences of various clauses if they are not strictly adhered to.*
 - *The Conditions should certainly not be considered a document to be consulted only if difficulties arise on site and conflicts are expected. They constitute the “rules of the game” ...which if not followed, may lead to adverse results for the position of one of the “players”.*
 - *Also many procedures in the Conditions are concerned with users communicating matters to each other which have effect on the execution of the Works and must be carried out within set time limits.”*

- **OBSERVING THE PROVISIONS OF THE CONTRACT SHOULD**
- **NOT BE CONSIDERED AS ADVERSERIAL OR CONFRONTATIONAL**
- **THE PROVISIONS OF THE CONTRACT ARE FOR THE BENEFIT**
- **OF BOTH PARTIES**

- **FOR EXAMPLE THE PURPOSE OF AN EXTENSION OF TIME IS:-**

- **KEEP ALIVE THE EMPLOYERS RIGHT TO AN END COMPLETION DATE IF A CAUSE OF ACTION WHICH IS HIS LIABILITY ARISES**
- **RELIEVES CONTRACTOR OF LIABILITY FOR LIQUIDATED DAMAGES**

THE IMPORTANCE OF KEEPING RECORDS

- **RECORDS ARE THE EVIDENCE REQUIRED WHEN ASCERTAINING A CONTRACTORS OR SUB-CONTRACTORS ENTITLEMENT TO AN EXTENSION OF TIME OR REIMBURSEMENT OF ADDITIONAL COST.**
- **RECORDS MUST BE SUFFICIENT TO DEAL WITH:**
 - **CAUSE OF ACTION E.G.**
 - **SUB SEA BED CONDITIONS**
 - **POSSESSION OF SITE**
 - **EFFECTS INCLUDING DELAY AND DISRUPTION**
 - **QUANTUM**
- **ALSO TO DEAL WITH CONTRACTOR OR SUB-CONTRACTOR DELAYS**

RECORDS



- **THE ENGINEER OR EMPLOYER'S REPRESENTATIVE AND DISPUTE RESOLUTION TRIBUNALS WORK ON THE "BEST EVIDENCE RULE"**
- **CONTEMPORANEOUS RECORDS SHOULD BE KEPT RECORDING FACTS IN A NON CONTENTIOUS MANNER**
- **SUCH RECORDS SHOULD BE AGREED BETWEEN THE PARTIES**
- **IF NOT AGREED AND ONE PARTY KEEPS RECORDS AND THE OTHER PARTY DOES NOT THE TRIBUNAL WILL GENERALLY ACCEPT THE RECORDS OF THE PARTY WHO HAS KEPT THEM.**

RECORDS – CAUSES OF ACTION

- **SOME CAUSES SHOULD BE A MATTER OF FACT**
- **E.G. DENIAL OF POSSESSION OF SITE**
- **OTHER CAUSES OF ACTION INVOLVE MATTERS OF LAW, FACT AND OPINION**
- **E.G. ADVERSE SUB SEA BED CONDITIONS**
- **IT IS ESSENTIAL THAT WHATEVER THE CLAIMED CAUSE OF ACTION IS THE RECORDS ARE AVAILABLE.**

- **RECORDS RELATING TO CLAIMED ADVERSE SOIL CONDITIONS “BENCHMARK” - ARE SOIL CONDITIONS ENCOUNTERED “FORESEEABLE” FROM S.I. INFORMATION ISSUED FOR TENDER PURPOSES.**
- **FORSEEABILITY IS MATTER OF FACT AND OPINION**
- **ACTUAL CONDITIONS SHOULD BE MATTER OF FACT**
- **IF USING A C.S.D. OR T.S.H.D. GENERALLY DIFFICULT TO OBTAIN REPRESENTATIVE SAMPLES OF IN-SITU MATERIAL BUT MUST DO SO.**
- **IF USING A BACKHOE OR BUCKET DREDGER SHOULD NOT BE A PROBLEM.**

RECORDS – EFFECTS INCLUDING DELAY

- **GLOBAL CLAIMS GENERALLY LOOKED UPON WITH DISFAVOUR BY COURTS**
- **LINKING CAUSE AND EFFECT**
- **METHODOLOGY**
- **CREDIBLE PLANNED AND AS BUILT PROGRAMMES**
- **NEC ECC AND OTHER FORMS OF CONTRACT REQUIRE COMPENSATION EVENTS (VARIATIONS & CLAIMS) TO BE DEALT WITH 'UP FRONT' AS RECOMMENDED BY SCL**
- **IMPACT/UPDATE (TIME SLICE) METHOD OF LINKING CAUSE AND EFFECT**

RECORDS – QUANTUM

- **VALUATION OF VARIATIONS**
 - **RULE 1 - B OF Q OR S. OF R.**
 - **RULE 2 - B OF Q OR S. OF R. USED AS A BASIS**
 - **RULE 3 - FAIR VALUATION GENERALLY RESOURCES**
 - **AT COST.**
 - **RECORDS ARE ESSENTIAL**
- **QUANTIFICATION OF 'COST' (CLAIM)**
- **RECORDS OF RESOURCES ARE ESSENTIAL**
- **NEC ECC - COMPENSATION EVENTS**
 - **RESOURCES VALUED IN ACCORDANCE WITH S.C.C.**
 - **RECORDS OF RESOURCES ARE ESSENTIAL.**

NOTICES OF ENTITLEMENT TO E OF T AND “COST”

- **MAIN CONTRACTUAL/LEGAL REASONS TO NOTIFY**
- **COMPLY WITH CONTRACT OR APPLICABLE LAW**
- **ALLOW OTHER PARTY TO TAKE MITIGATING ACTION**
- **ALLOW OTHER PARTY TO DEAL WITH TIME AND COST CONSEQUENCES.**

NOTIFICATION

- **DICTIONARY DEFINITION**
- **FORMAL WRITTEN COMMUNICATION ISSUED TO OTHER PARTY**
- **CONSTRUCTION CONTRACTS INVARIABLY REQUIRE WRITTEN NOTIFICATION OF CLAIMS (COMPENSATION EVENTS) FOR E OF T AND ADDITIONAL “COST”.**

NOTIFICATION – ESSENTIAL ELEMENTS

- **A CLEAR STATEMENT OF FACTS**
- **EXPLANATION OF HOW THESE FACTS DIFFER FROM THE BASELINE PRESCRIPTIONS OF THE CONTRACT AND UNDER WHICH CLAUSE/S OF THE CONTRACT IS THE CLAIM BEING MADE**
- **BEST ESTIMATE IN TERMS OF TIME AND COST OF THE CONSEQUENCES OF THE CIRCUMSTANCES ENCOUNTERED**
- **PROPOSED ACTIONS TO BE TAKEN AND/OR REQUEST FOR INSTRUCTIONS.**

- **NOTE ALSO PROVISIONS OF CLAUSE 68 – NOTICES**
- **AS BETWEEN CONTRACTOR AND EMPLOYER**
- **E.G. NOTICE TO REFER TO ADJUDICATION OR ARBITRATION.**

- **CONTRACTOR TO SEND TO EMPLOYER’S LAST KNOWN ADDRESS OR, IF EMPLOYER A COMPANY, ITS REGISTERED OFFICE.**

- **EMPLOYER TO SEND ANY NOTICES TO CONTRACTOR’S PRINCIPAL PLACE OF BUSINESS OR, IF CONTRACTOR A COMPANY, ITS REGISTERED OFFICE.**

TIMING OF NOTIFICATION

- **MOST CONTRACTS ARE PRESCRIPTIVE**
- **E.G. FIDIC 'BLUE' BOOK CLAUSE 10.4**
- **“.....AN ITEMISED MAKE-UP OF VARIATIONS AND CLAIMS INCLUDING TIME AND COST EFFECTS WITHIN 28 DAYS OF THE INSTRUCTION OR OF THE EVENT GIVING RISE TO THE CLAIM.....”**

TIMING OF NOTIFICATION

- **MANY CONTRACTS NOW SPECIFY THAT FAILURE TO GIVE NOTIFICATION WITHIN PRESCRIBED TIME WILL RESULT IN**
- **LOSS OF ENTITLEMENT**

- **CLAUSE 20.1 OF FIDIC 'RED' BOOK**
- **“IF CONTRACTOR FAILS TO GIVE NOTICE OF A CLAIM WITHIN SUCH PERIOD OF 28 DAYS.....”**

- **SUB-CONTRACTS MAKE SIMILAR PROVISION**
- **CLAUSE 7.2 OF FIDIC FORM OF SUB-CONTRACT**
- **“PROVIDED THAT SUB-CONTRACTOR SHALL NOT BE ENTITLED**
- **TO SUCH E. OF T. UNLESS HE HAS SUBMITTED NOTICE WITHIN**
- **14 DAYS OF SUCH DELAY FIRST OCCURRING”.**

NOTIFICATIONS – COMMON LAW DAMAGES CLAIMS



- IF CONTRACTOR OR SUB-CONTRACTOR FAIL TO GIVE NOTICE WITHIN TIME PRESCRIBED UNDER THE CONTRACT DO THEY LOSE THEIR ENTITLEMENTS?
- IT DEPENDS!!
- IF CONTRACT CONTAINS AN EXCLUSIVE REMEDIES CLAUSE E.G. MF/1, ANSWER IS YES.
- IF CONTRACT DOES NOT INCLUDE SUCH A CLAUSE ANSWER IS NO BUT DAMAGES CLAIMS MORE DIFFICULT.

DETERMINATION OF LIABILITY FOR DELAY AND DISRUPTION



- **CONSTRUCTION CONTRACTS PRESCRIBE RISKS BORNE BY EACH PARTY**
- **E.G. MOST CONTRACTS PRESCRIBE CONTRACTOR BEARS RISK OF FORESEEABLE CONDITIONS AND EMPLOYER BEARS RISK OF CONDITIONS NOT REASONABLY FORESEEABLE.**
- **IN DETERMINING LIABILITY THE CONTRACT DOCUMENTS AND IN PARTICULAR THE CONDITIONS OF CONTRACT, MUST FIRST BE CONSIDERED AS TO WHICH PARTY BEARS RISK OF EVENT WHICH HAS OCCURRED.**
- **E.G. CLAUSE 6.1 DEFINED RISKS OF FIDIC “BLUE”**

DETERMINATION OF LIABILITY



- **IF CONTRACTOR CLAIMS A RISK EVENT WHICH EMPLOYER LIABLE FOR HE MUST THEN PROVE, ON THE BALANCE OF PROBABILITY (51%/49% OR 99%/1% ?), THAT SUCH AN EVENT HAS OCCURRED.**
- **RECORDS AS TO FACTS E.G. HAS THE EMPLOYER GIVEN THE CONTRACTOR POSSESSION OF THE “SITE” – CLAUSE 1.1.20**
- **IN SOME INSTANCES, E.G. SOIL CONDITIONS CLAIM, IT WILL ALSO BE NECESSARY TO ADDUCE EXPERT OPINION EVIDENCE.**
- **NOTICES MUST HAVE BEEN GIVEN IN ACCORDANCE WITH CONTRACT AND PARTICULARS, INCLUDING EVIDENCE, OF GROUNDS FOR MAKING CLAIM AND THE CLAUSE/S IN THE CONTRACT UNDER WHICH THE CLAIM IS BEING MADE SPECIFIED**
- **IF LIABILITY/CAUSE OF ACTION PROVEN THEN EFFECTS INCLUDING DELAY AND DISRUPTION AND QUANTUM TO BE ASCERTAINED.**

Workshop Conclusions

Plenary Session



Contract Management for Dredging and Maritime Construction

Discussion



Contract Management for Dredging and Maritime Construction

Breaking new grounds



Rob van Gelder

President

International Association of Dredging Companies

Views on the future of dredging

- *Introduction*
- *The 'roaring' nineties*
- *Today's industry*
- *Views on the future*
- *Recommendations for the future*



The 'roaring' nineties

The market:

- 1990-1994 ~ *reshaping Hong Kong*
- 1996-2001 ~ *expanding Singapore*
- *strong growth of world trade (globalisation)*
- *more governmental spending to infrastructure*



The 'roaring' nineties

The industry:

- consolidation into a limited number of global players*
- large investments in new generation equipment (jumbo's)*
- from traditional approaches into a high tech and professional working environment*
- upscaling and internationalisation of professional and operational work force*



The 'roaring' nineties

The client-contractor relationship:

- still very traditional*
- still public tendering (price)*



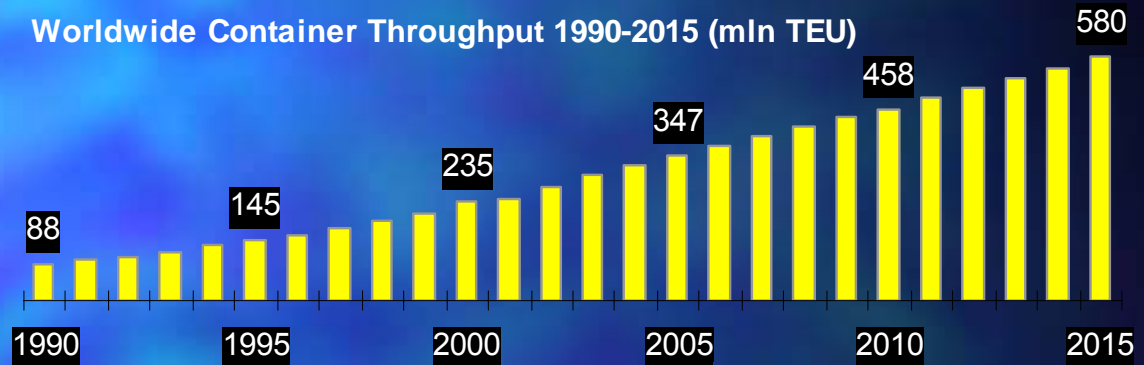
Long term business drivers

World trade > growing sea transport

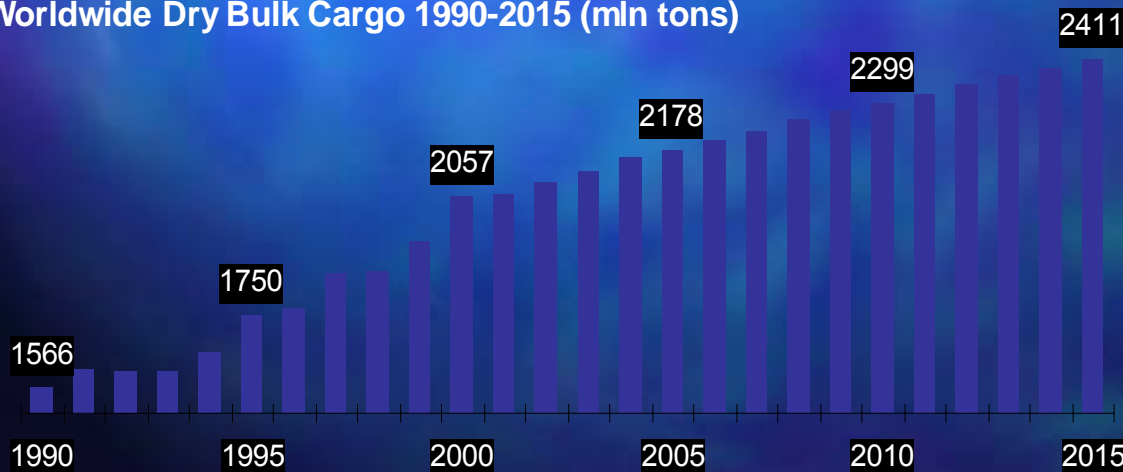
Harbours & waterways

- . recurring maintenance
- . deepening & extension
- . capital works

Worldwide Container Throughput 1990-2015 (mln TEU)



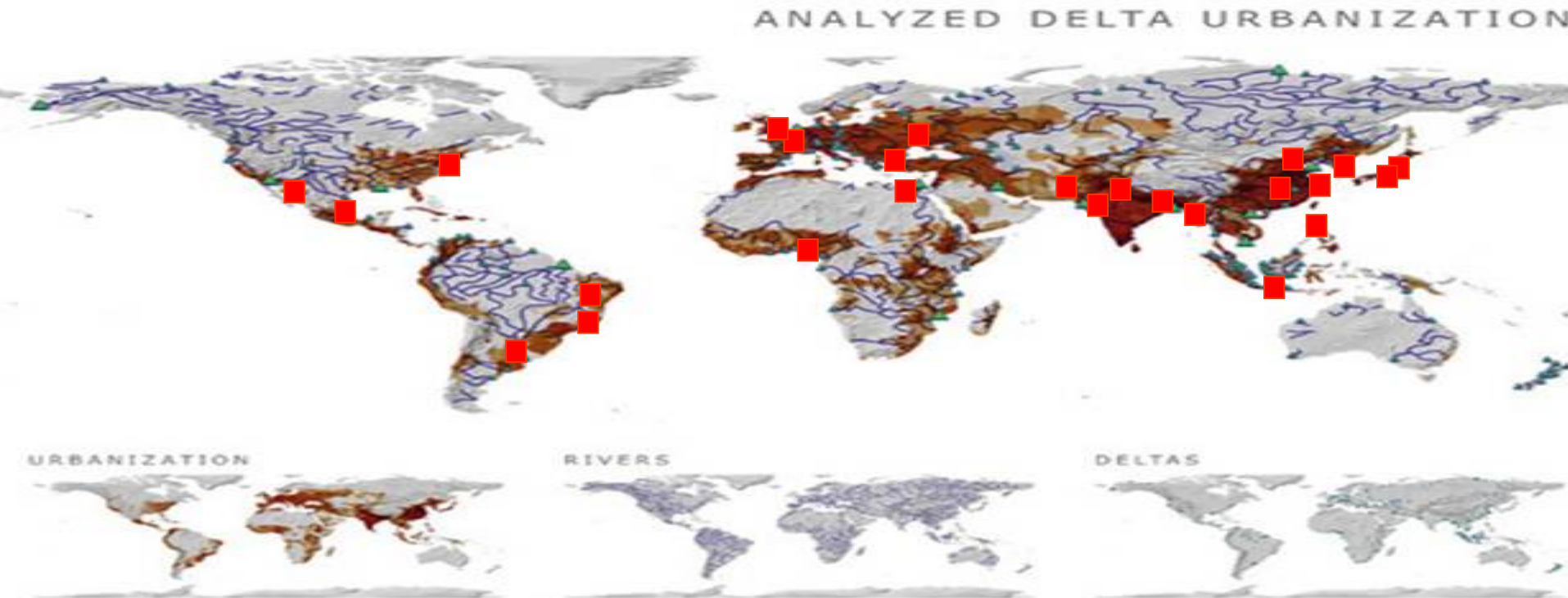
Worldwide Dry Bulk Cargo 1990-2015 (mln tons)



Long term business drivers

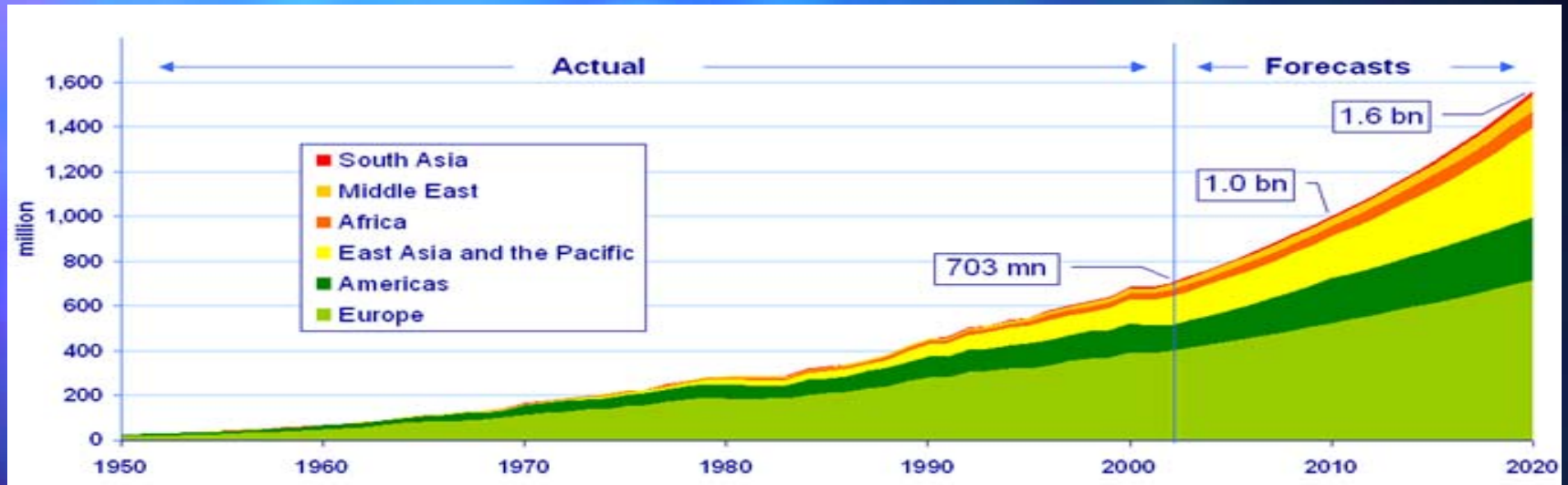
World population growth & climate change

- *Creation of new land in sea*
- *Coastal and riverbank protection*



Long term business drivers

Growing tourism on land and in water



- *Creation of new land in sea*
- *Beach extension & replenishment*
- *Cruise terminals*



Long term business drivers

Growing global LNG transport

- Creation of new land in sea
- Construction & extension of LNG ports

Net Gas-Trade Flows (bln m³)

2000

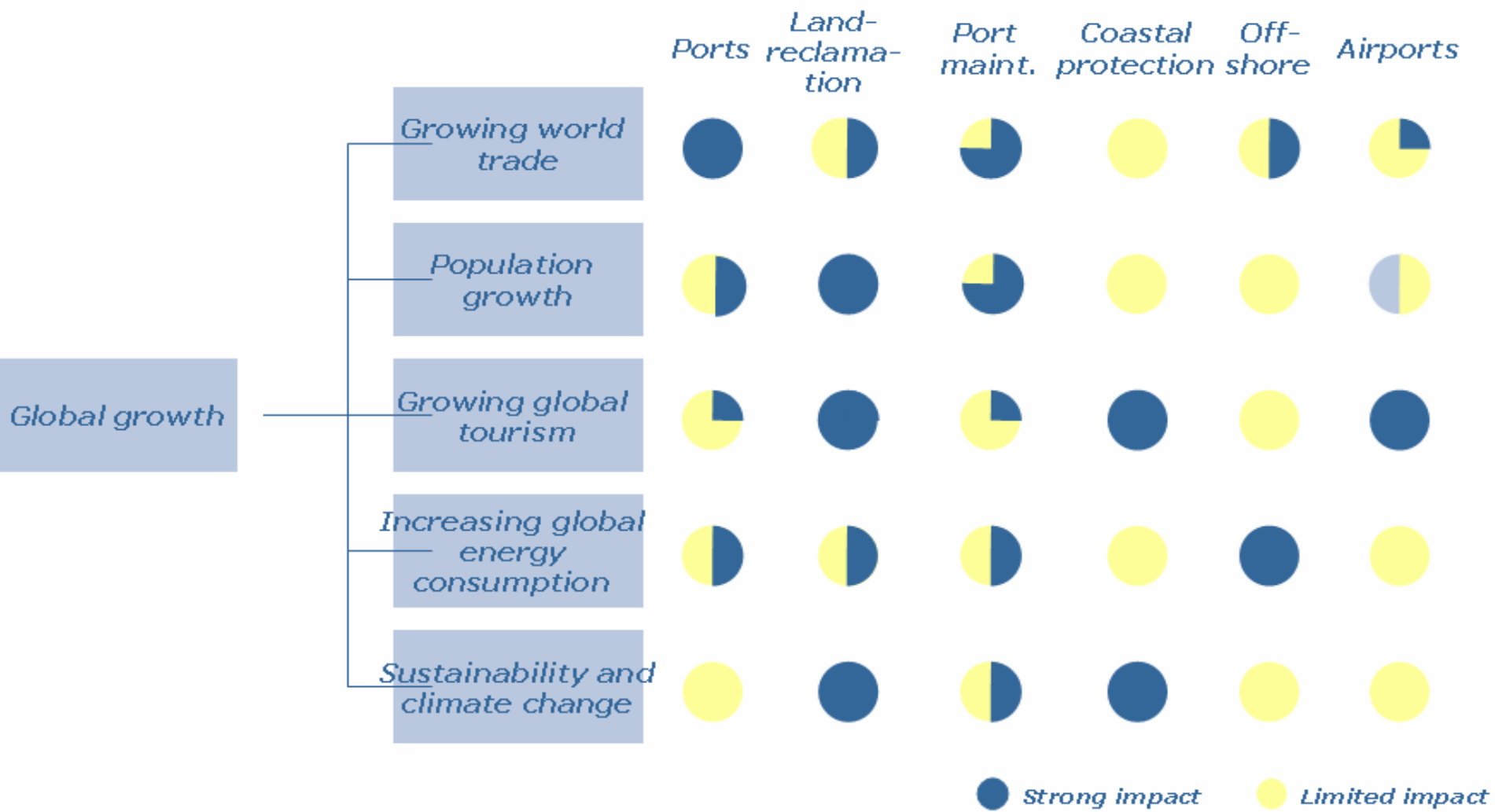


2030



Macro trends remain strong & global

Impact of global trends on dredging industry



Turnover 2005 - drivers

in mln. €

trade capital	2.518	32%
trade maintenance	1.656	21%
coastal defence	434	6%
urban development	1.406	18%
energy	1.094	14%
tourism	692	9%

total	7.800	
--------------	--------------	--

of which semi-open	2.380
of which stone work	920

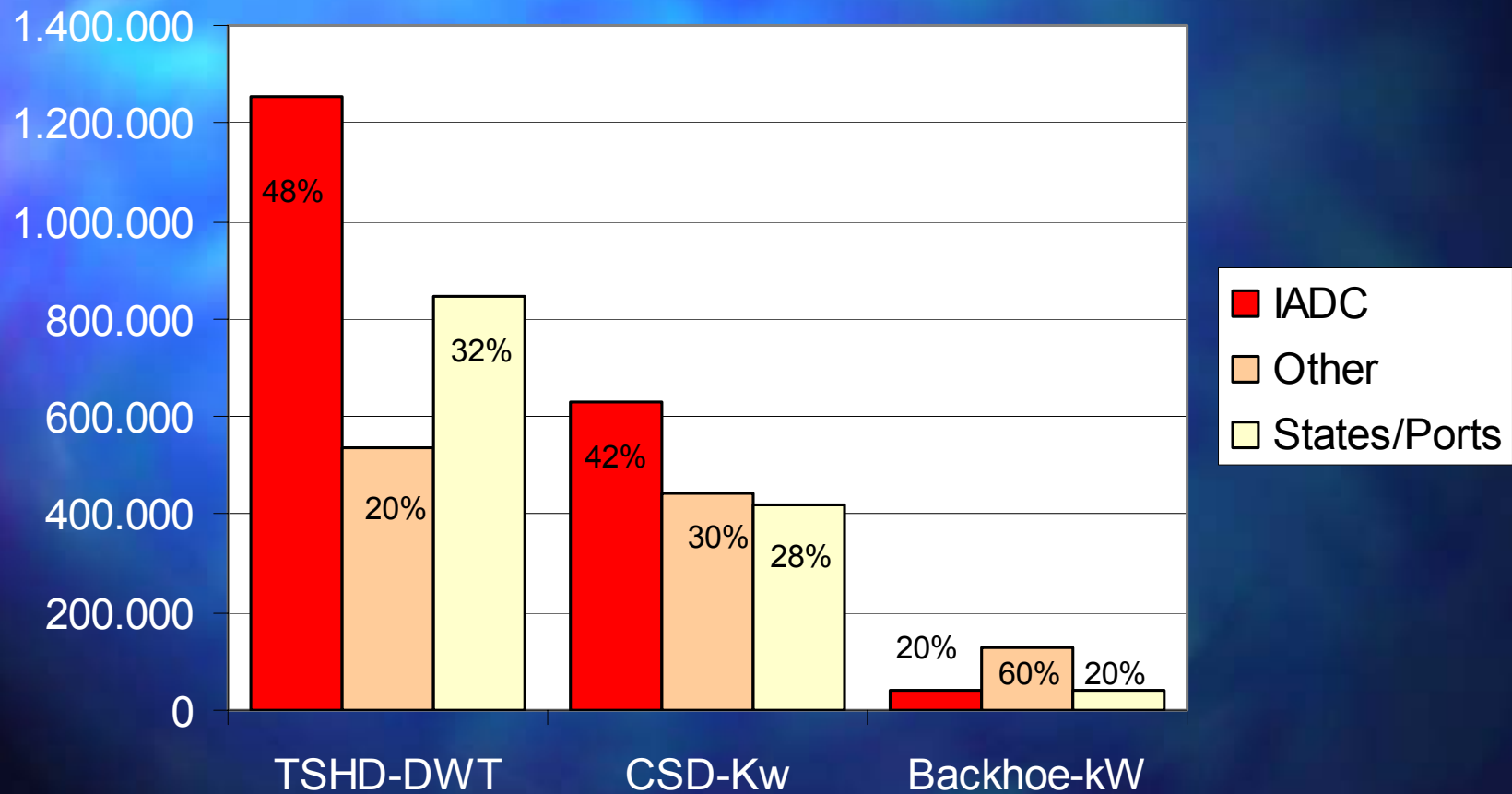


Turnover 2005 - regions

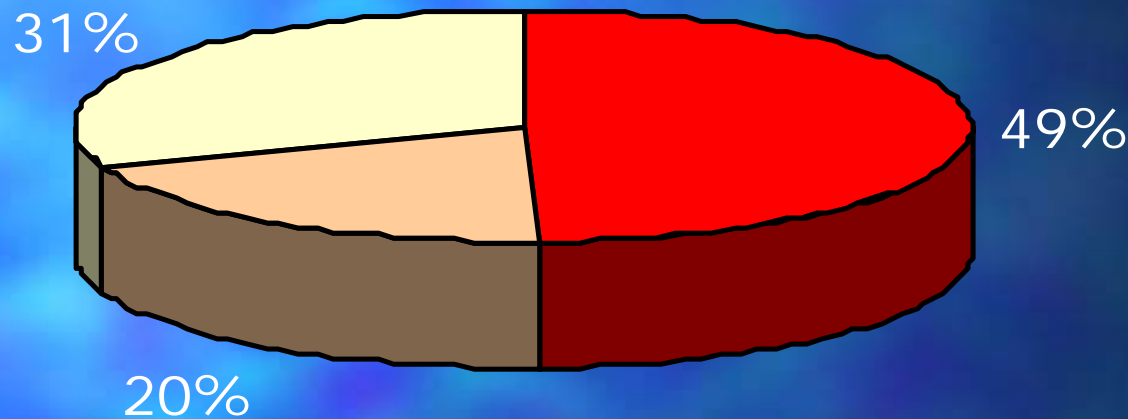
in mln. €

	free market	semi-open	total	%	of which stonework
Africa	350	100	450	6%	25
North America	35	875	910	12%	85
Latin America	320	0	320	4%	10
Europe	1.440	155	1.595	20%	235
Middle East	1.900	0	1.900	24%	425
India	425	0	425	5%	20
Asia	950	1.250	2.200	28%	120
total	5.420	2.380	7.800		920

Capacity



Turnover 2005 – market shares



■ IADC members ■ Other private ■ Semi-open

IADC members' share of total market approx. 49%

IADC members' share of open markets approx. 71%

IADC members...

They come from:

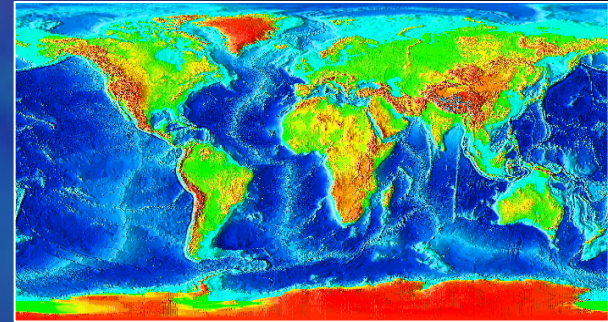
- *Europe*
- *Asia*

They stand for:

- *high quality*
- *professional workforce*
- *safe operations*
- *care for the environment*
- *fair contract conditions*



The future key issues (1)



- *Dredging is a global business*
- *Strong demand for dredging capacity*
- *Limited capacity available
(relative to demand)*
- *New equipment will be built,
older equipment will be scrapped*
- *Battle for quality people*

The future key issues (2)

- *Strong innovation on 3 levels*
 - *equipment*
 - *basic technology*
 - *project specific solutions*
- *Change in client – contractor relationship*
 - *more involvement in planning stage*
 - *more partnering (alliance – model)*
- *Contractors will be more selective in picking jobs and client relationships*



The future

*What it can mean for **clients***

- *More focus on quality and reliability of contractors*
- *Open for partnering*
- *More focus on value for money rather than on cheapest budget price*



The future

What it can mean for consultants

- *Being a 'broker' for partnering and alliance relationships*
- *Keeping a keen eye on quality and reliability*





The future

*What it can mean for **contractors***

- *Selective in project picking*
- *Looking for reliable (partner-type) clients*
- *Letting clients benefit from the innovative and professional qualities*

Looking for win-win projects

Breaking new grounds



Rob van Gelder

President

International Association of Dredging Companies

Conference Objectives

- **Bring together** contracting partners in the dredging industry
- **Increase insight in crucial issues** in contract management among partners in dredging and maritime construction
- **Develop**, amongst contracting partners, **a constructive approach** to the planning, design and execution of dredging and maritime construction projects



Chairman of the Organising Committee

John Land, Director, Dredging Research UK Ltd

Contract Management for Dredging and Maritime Construction