



Gas LNG Europe

GLE Workshop

Business Rules

Jean-Michel CABANÈS

GLE Vice-President
Business Rules Working Group

Brussels, 18th January 2006



Gas LNG Europe

Business Rules Working Group : Main issues

- Technical issue :
 - *functional role of an LNG terminal*
 - *investment consideration*

- Commercial issue :
 - *domestic energetic policy dimension*

- Working programme



Gas LNG Europe

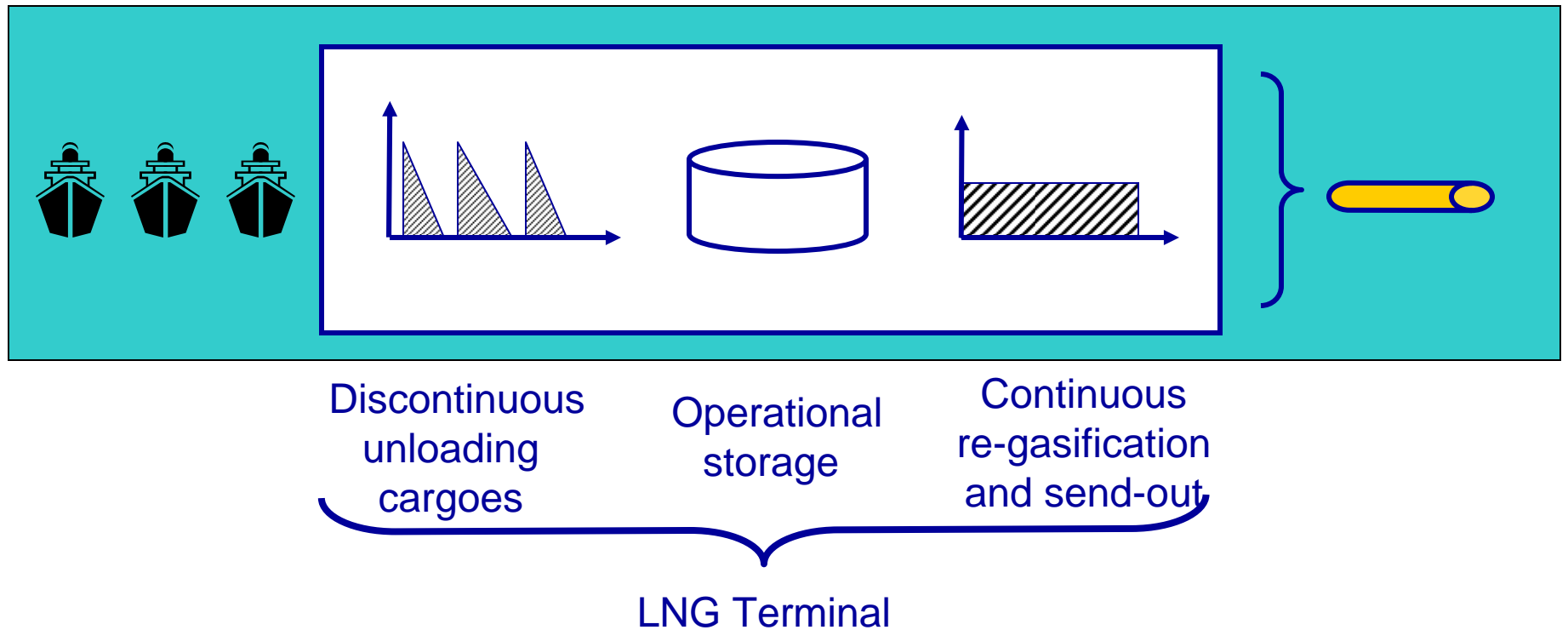
***Business Rules Working Group :
Main issues***

1. Technical issue





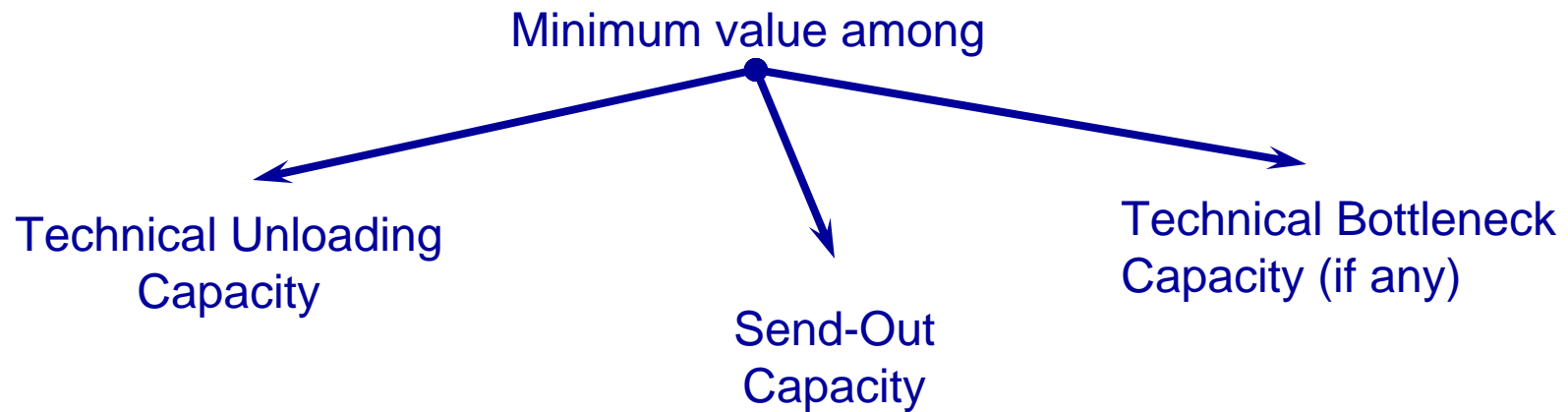
To understand the Business Rules issue we must first consider the technical issue





Technical Capacity Assessment

Technical Capacity =
maximum throughput of the LNG terminal
expressed in energy per unit time



nb. storage capacity not relevant in this approach



Gas LNG Europe

LNG tanks : a specific issue

- LNG tanks represent the main part of the terminal cost
- a spot user makes a disproportionate use of storage compared with a frequent user
- "reflecting the cost of the storage ?" : a dilemma
 - *if yes : discouraging spot imports*
 - *if no : establishing cross-subsidies from the frequent user to the spot user*



Gas LNG Europe

***Business Rules Working Group :
Main issues***

2. Commercial issue





***To understand the Business Rules issue
we must also consider the functional issue***

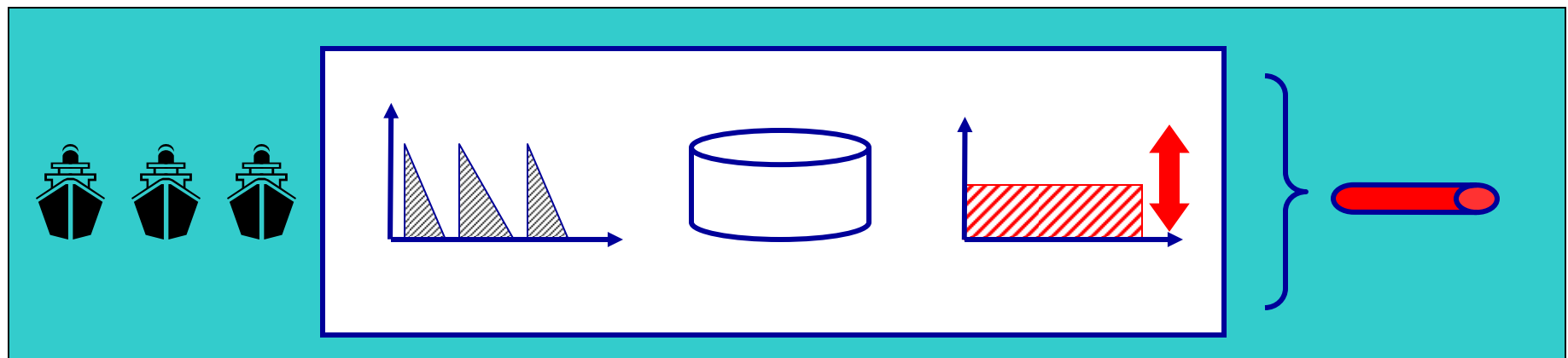
- An LNG terminal is designed and operated to match LNG schedule with specific domestic constraints

- An LNG terminal can offer either of :
 - *a downstream flexibility*
 - *an upstream flexibility*

- Building LNG tanks is often a challenge !
 - *strong local opposition ("NIMBY")*
 - *regulation framework (eg. environmental, safety)*



LNG Terminal with *downstream flexibility*

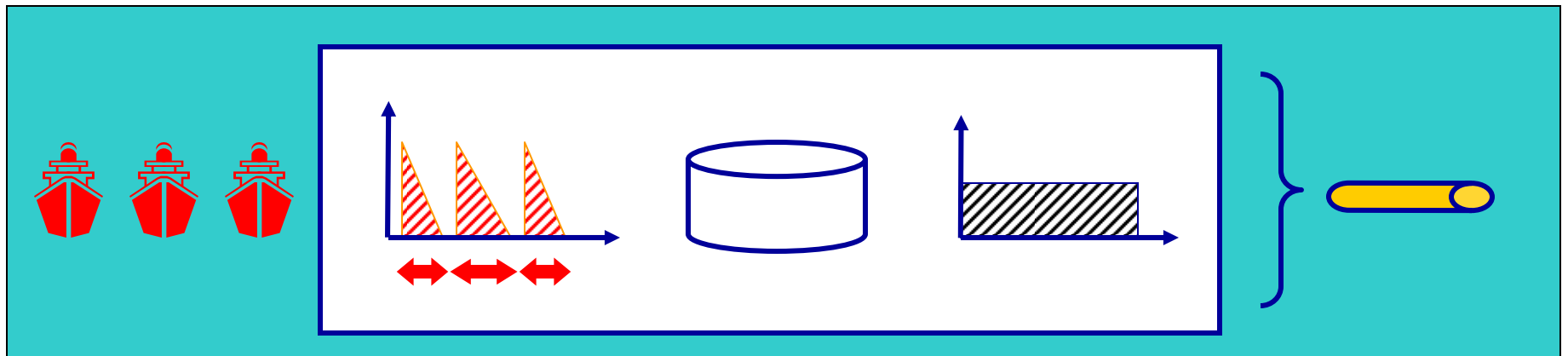


LNG storage is used to modulate send-out flow
consequence : less flexibility in LNG unloading schedule

- ❖ Countries with lack of underground storages and several LNG terminals



LNG Terminal with *upstream flexibility*



LNG storage is used to modulate unloading flow
consequence : more flexibility in LNG carriers unloading schedule

❖ Countries with existing flexibility tools :
eg. underground storages, multiple pipelines interconnexions



A main issue :

"how to make unused capacity available ?"

- Three requirements :
 - *an available unloading slot*
 - *sufficient space in storage tanks*
 - *sufficient send-out capacity*

- Maximizing unloading slots would require to rigidify the unloading program a long time ahead
 - *"maximizing unloading slots" vs. "reality of the LNG chain"*

- Sufficient space in storage tanks may require to increase the send-out flow ... and is subject to :
 - *acceptance by the primary capacity users*
 - *capability of the downstream transmission system*



Gas LNG Europe

***Business Rules Working Group :
Main issues***

3. Working programme





Gas LNG Europe

GLE endeavours to build a common understanding of the LNG business

- The LNG chain management and the diversity of the each domestic energy framework imply there is no unique model for LNG terminals business rules
- We will need to examine several items in order to elaborate a common understanding of the LNG business issue
- The first steps GLE is developing in this field aim to elaborate :
 - *a clear methodology to assess the technical capacity*
 - *scheduling rules*
 - *secondary market rules*



Gas LNG Europe

GLE Workshop

Business Rules

Jean-Michel CABANÈS

GLE Vice-President
Business Rules Working Group

Brussels, 18th January 2006