



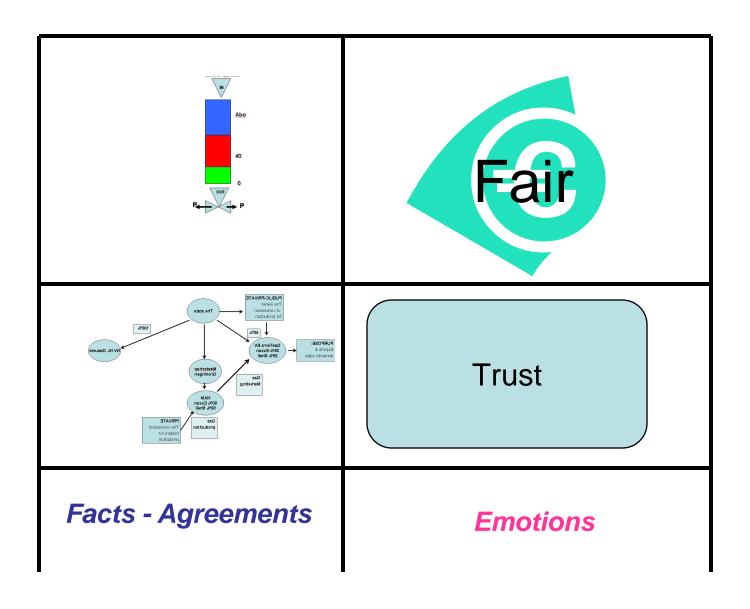


NOC - IOC Forum

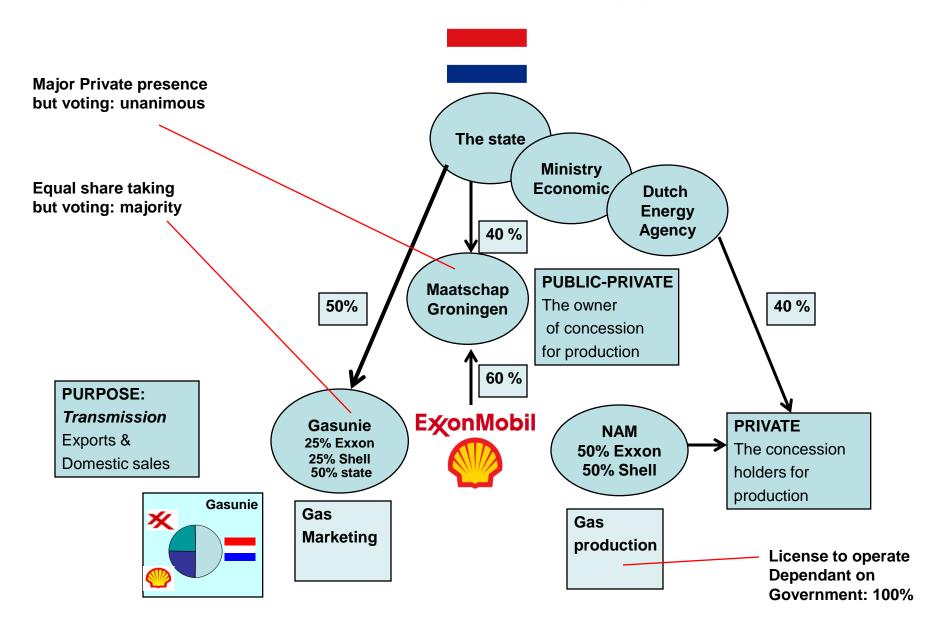
Dutch gas policy

A public-private approach or a simple NOC/IOC cooperation over the last 40 YEARS

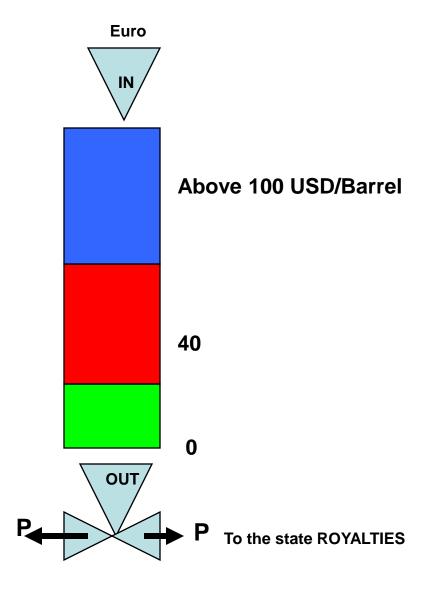
Partnership



The structure in 1968



A flexible pricing/royalty scheme to share price risks



- Green: The bottom price always reflects the loan scheme's of the private stakeholder, under all circumstances
- Red: Oil prices/gas prices are modest; both gain and are both eager to cooperate (red).
- Blue: In the top part; most of the earnings go to the public interest, reflecting the importance of its stake in the PP partnership:
- The essential aspect is that the scheme is flexible and among partners 'functional' even dealing with extreme and volatile high oil prices
- Despite developments in Europe as far as liberalization is concerned, the PPP settings remain solid, with the stakeholders adapting to the idea of having to compete in a pan-European gas market

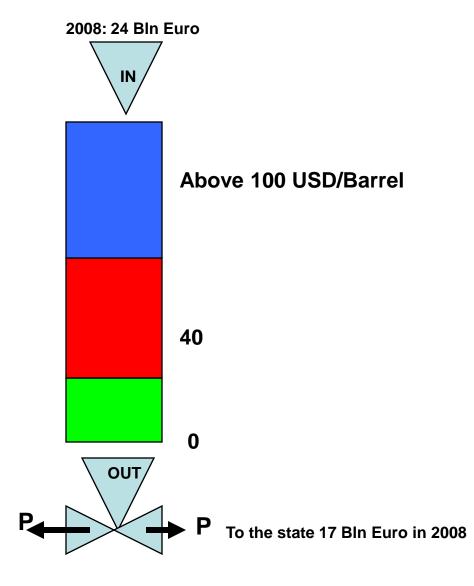
The barriers ahead

- In the 1080's: high oil prices and in-depth investments have been paid back to the private parties involved.
- In the 2000's: liberalisation in Europe, while the Duchies where spearheading unbundling and regulations.

Private positions (IOC)
non regulated business
no public service obligations
short term focus
national settings to be avoided

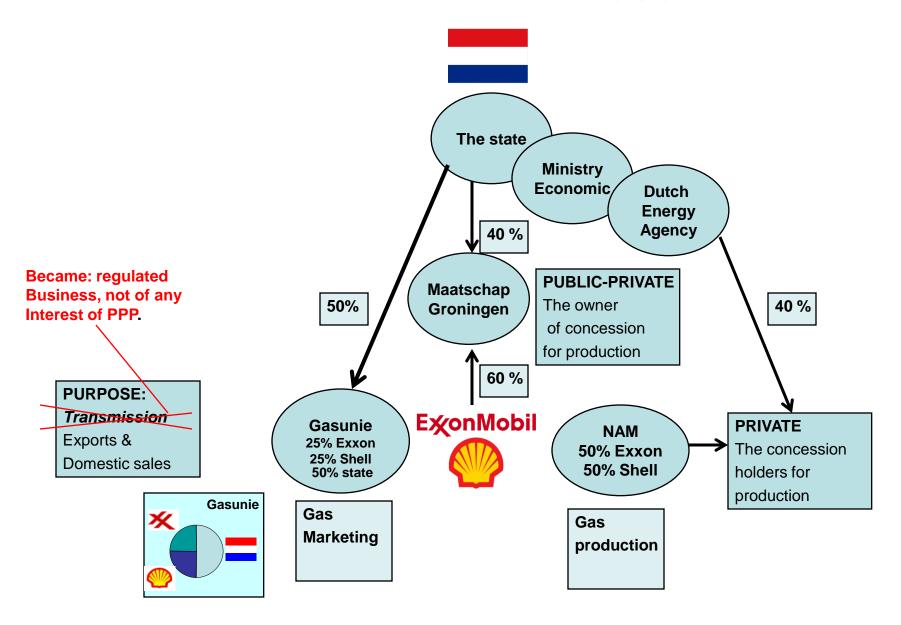
Public positions (NOC)
regulated business is optional
public service obligations will have impact
long term focus
national settings are key: employment and
national investments over the long term

After the pay-back period and high oil prices

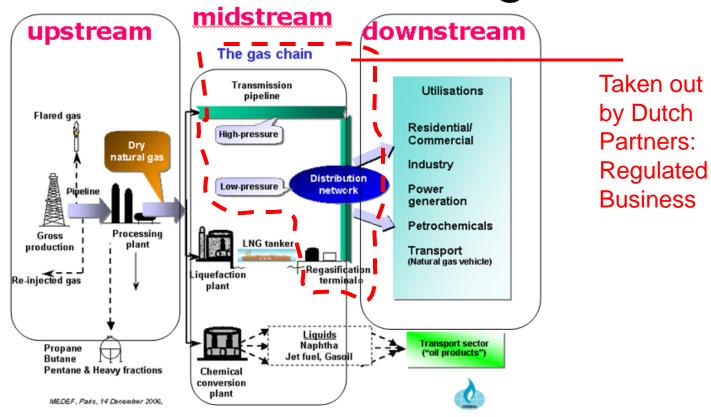


- Green: paid back the investments in place: grid and up- & mid-stream facilities
- Red: future view: will be staying high and provides huge gain for IOC, publicly for the 1980's unacceptable
- Blue: immediate needed in order to satisfy public debate and 'feelings'. Major change over chairing profits to wards the state.

The structure in 2006



Value Chain change



The EU setting, followed by a National legal setting:

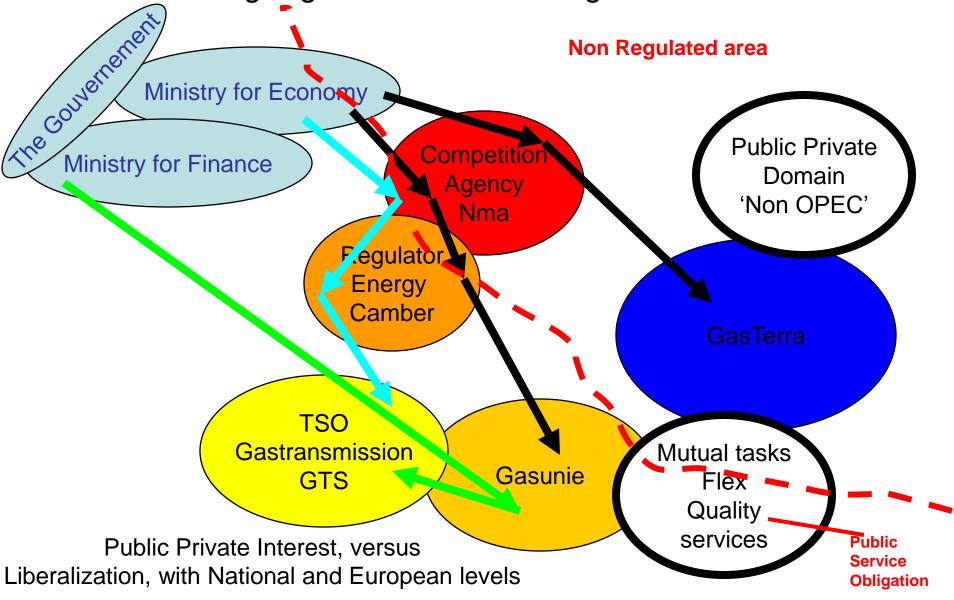
Transmission; high pressure and low pressure are fully Governmental owned and furthermore regulated as regulated business.

The partnership had no interest in regulated business (7% return of investment) and left this asset of the Government, by compensating the private partners.

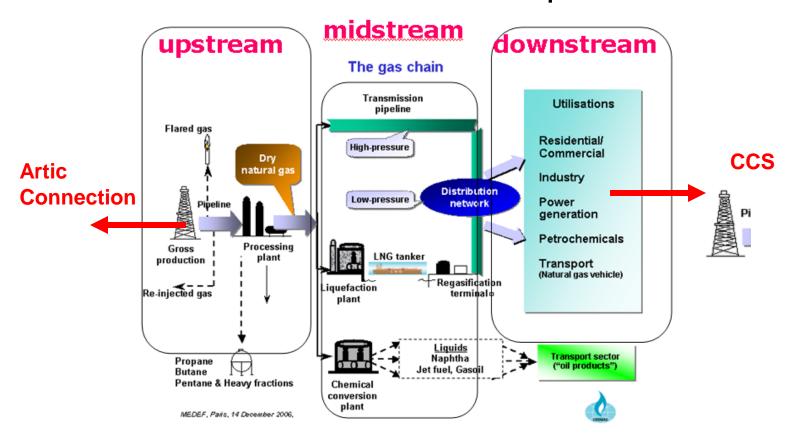
Main concern in Europe is: will natural gas storage be regulated business???

The typical Dutch scheme, as non OPEC,

including regulated and none regulated business



Value Chain future options



Future developments and partnership cooperation options:

CCS: extending the present value chain: COULD be, but

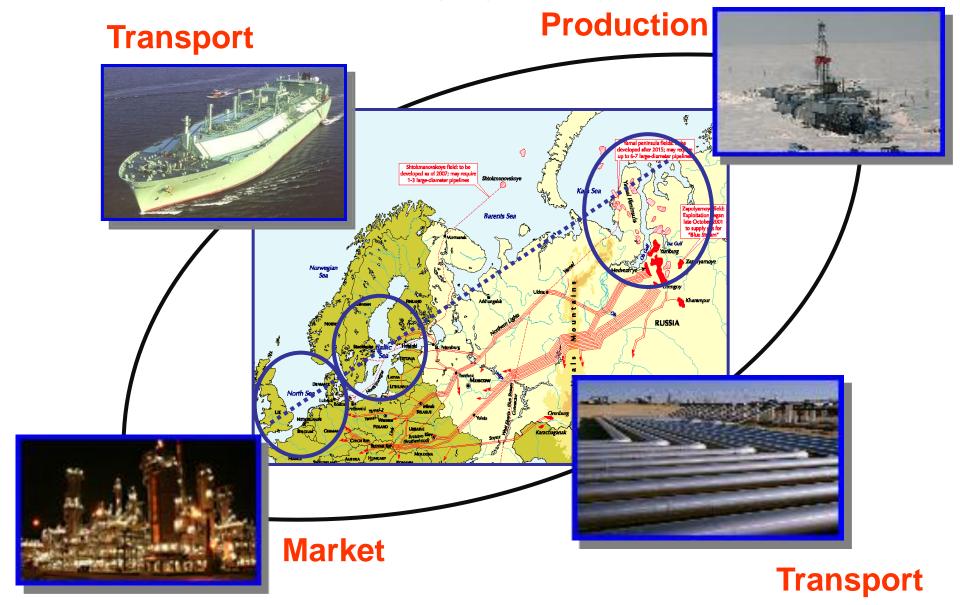
depend on legal setting: regulated or none regulated!, just wait and see

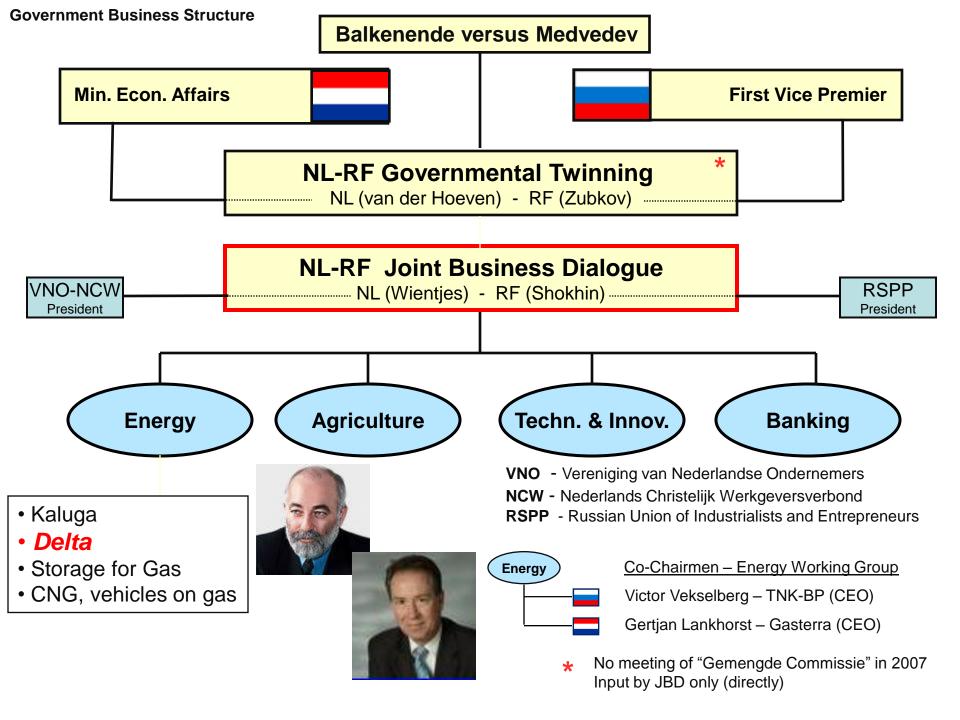
Artic: extension of bilateral cooperation in none regulated area and with

focus of IOC = liberated market settings with NOC = Governmental guided supply

looks quite promising!!

An Artic option, while dealing with Russian-Dutch SoS and SoD





The key to a successful PPP is a sound long-term agreement with flexibility

- Partnership starts with emotion, but agreements and arrangements will deal with the future (long term), so be flexible (EM)
- Green field developments, joint efforts are needed (Russia, Irangetc) and given the NOC reserve base; NOC/IOC cooperation needed.
- Logistics should focus on the fuel of choose: fossil fuels and here partnership is possible (none regulated business)
- Power should focus on the fuel of choose, natural gas: partnership possible, enlarging the value chain.
- Transition fuel: natural gas, with a possible combination of wind, to sun, name it !!!: possible, but legal frameworks are still quite weak.
- CCS and natural gas storages, uncertain, given the possible EU legislation: regulated???, others are needed???!!!!!