

# **Nigeria Extractive Industry Transparency Initiative**

Presentation of  
final audit reports

by

Hart Group

11<sup>th</sup> April 2006

# Overview

- Licensing
- Project approval
- Production
- Gas
- Export Lifting
- Taxation and Royalty
- NDDC
- Gas marketing
- Crude marketing
- Refineries
- Product importation
- Financial overview



# Licensing



# Process Audit: Licensing

- 2005 Round much improved on earlier, but we suggest further improvements
- Pre-qualification: tighten the criteria
- Bid against PSC
- Improve data management and availability
- Local Content Vehicles: self-selection
- Adhere to the timetable
- Legislate to minimise discretion of Minister



# Licensing: signature bonuses

- ‘earnest’ money

INVENTORY OF NIGERIAN LICENSING ACTIVITY 1999-2004

| Bonus in USD \$              |               |            |                 | Total<br>USD**000 | 1999<br>USD**000 | 2000<br>USD**000 | 2001<br>USD**000 | 2002<br>USD**000 | 2003<br>USD**000 | 2004<br>USD**000 |
|------------------------------|---------------|------------|-----------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Name of Payer                | Type of lease | Lease Area | Expiration Date |                   |                  |                  |                  |                  |                  |                  |
| Chevron Ultra Deep Nig Ltd   | OPL 250       | 2441.237   | 2011            | 75,000            |                  |                  | 75,000           |                  |                  |                  |
| Elf Petroleum Nig Ltd        | OPL 221       | 2451       | 2013            | 5,000             |                  |                  |                  |                  | 5,000            |                  |
| Emerald Energy Resources Ltd | OPL 229       | 1356.663   | 2006            | 20,000            |                  |                  | 20,000           |                  |                  |                  |
| Esso E& P Ltd                | OPL 214       | 2585.878   | 2011            | 22,000            |                  |                  | 22,000           |                  |                  |                  |
| Heritage                     | OPL 247       | 1224       | 2014            | 20,000            |                  |                  |                  |                  |                  | 20,000           |
| Oil and Gas Nig Ltd          | OPL 249       | 2440.21    | 2013            | 20,000            |                  |                  |                  |                  | 20,000           |                  |
| Oranto Petroleum Ltd         | OPL 320       | 1789.443   | 2012            | 7,000             |                  |                  |                  | 7,000            |                  |                  |
| Ocean Energy Nig Ltd         | OPL 242       | 2283       | 2014            | 12,800            |                  |                  |                  |                  |                  | 12,800           |
| Petroleo Brasileiro Nig Ltd  | OPL 324       | 1905.983   | 2011            | 20,000            |                  |                  | 20,000           |                  |                  |                  |
| Philips Exploration Nig Ltd  | OPL 318       | 2530       | 2012            | 30,000            |                  |                  |                  | 30,000           |                  |                  |
| Shell Nig Ultra Deep Ltd     | OPL 245       | 1958.31    | 2013            | 210,000           |                  |                  |                  |                  | 210,000          |                  |
| Zebra Energy Ltd             | OPL 248       | 2447.61    | 2014            | 20,000            |                  |                  |                  |                  |                  | 20,000           |
| South Atlantic Pet. Ltd      | OPL 246       | 2250       | 2009            | 25,000            | 25,000           |                  |                  |                  |                  |                  |
|                              |               |            |                 | <b>486,800</b>    | <b>25,000</b>    | <b>0</b>         | <b>137,000</b>   | <b>37,000</b>    | <b>235,000</b>   | <b>52,800</b>    |



# Capital project process



# Process Audit: project contracting

- Affects efficiency, volumes, costs for PPT
- International Best practice (local ?)
- JV & PSC: delays in contracting procedures
- Need to empower NAPIMS & OPCOM
- Portfolio selection model
- OPCOM budget to be definitive
- NAPIMS to fund its share from Government and Alternative Sources



# Cash Calls paid to operators

| JV OPERATOR  | 1999<br>US\$<br>Millions | 2000<br>US\$<br>Millions | 2001<br>US\$<br>Millions | 2002<br>US\$<br>Millions | 2003<br>US\$<br>Millions | 2004<br>US\$<br>Millions |
|--------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Chevron      | 251                      | 336                      | 402                      | 382                      | 423                      | 257                      |
| Elf          | 139                      | 134                      | 81                       | 132                      | 314                      | 281                      |
| Mobil        | 304                      | 274                      | 243                      | 572                      | 581                      | 437                      |
| NAOC         | 138                      | 135                      | 170                      | 324                      | 289                      | 287                      |
| SPDC         | 704                      | 647                      | 543                      | 981                      | 750                      | 623                      |
| TOPCON       | 56                       | 31                       | 43                       | 34                       | 95                       | 0                        |
| PANOCEAN     | 15                       | 6                        | 0                        | 0                        | 22                       | 18                       |
| <b>TOTAL</b> | <b>1,607</b>             | <b>1,563</b>             | <b>1,482</b>             | <b>2,425</b>             | <b>2,474</b>             | <b>1,903</b>             |

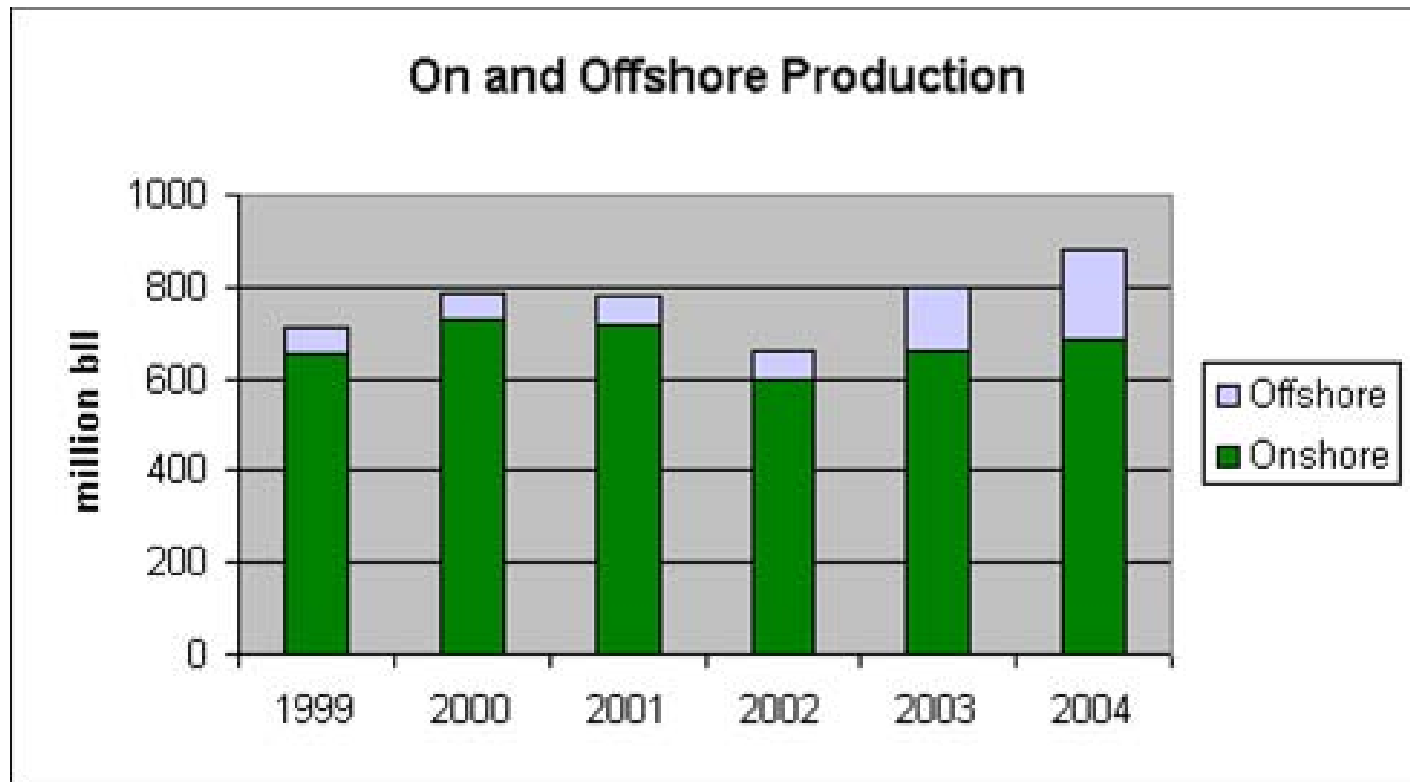
| JV OPERATOR  | 1999<br>NGN<br>Millions | 2000<br>NGN<br>Millions | 2001<br>NGN<br>Millions | 2002<br>NGN<br>Millions | 2003<br>NGN<br>Millions | 2004<br>NGN<br>Millions |
|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Chevron      | 8,432                   | 17,218                  | 17,682                  | 34,882                  | 18,123                  | 14,807                  |
| Elf          | 3,294                   | 5,290                   | 7,553                   | 16,256                  | 11,157                  | 15,550                  |
| Mobil        | 11,075                  | 18,760                  | 20,398                  | 34,508                  | 21,487                  | 23,908                  |
| NAOC         | 4,479                   | 6,892                   | 11,745                  | 16,100                  | 18,592                  | 20,300                  |
| SPDC         | 32,916                  | 31,429                  | 45,005                  | 100,575                 | 65,045                  | 52,299                  |
| TOPCON       | 2,003                   | 2,019                   | 3,698                   | 1,899                   | 1,058                   | 0                       |
| PANOCEAN     | 533                     | 341                     | 0                       | 0                       | 0                       | 0                       |
| <b>TOTAL</b> | <b>62,732</b>           | <b>81,949</b>           | <b>106,081</b>          | <b>204,220</b>          | <b>135,462</b>          | <b>126,864</b>          |



# Production



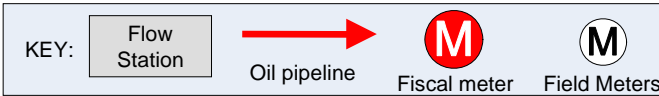
# Production analysis, by terminal



EPNL Oil Flows through the Shell Pipeline System

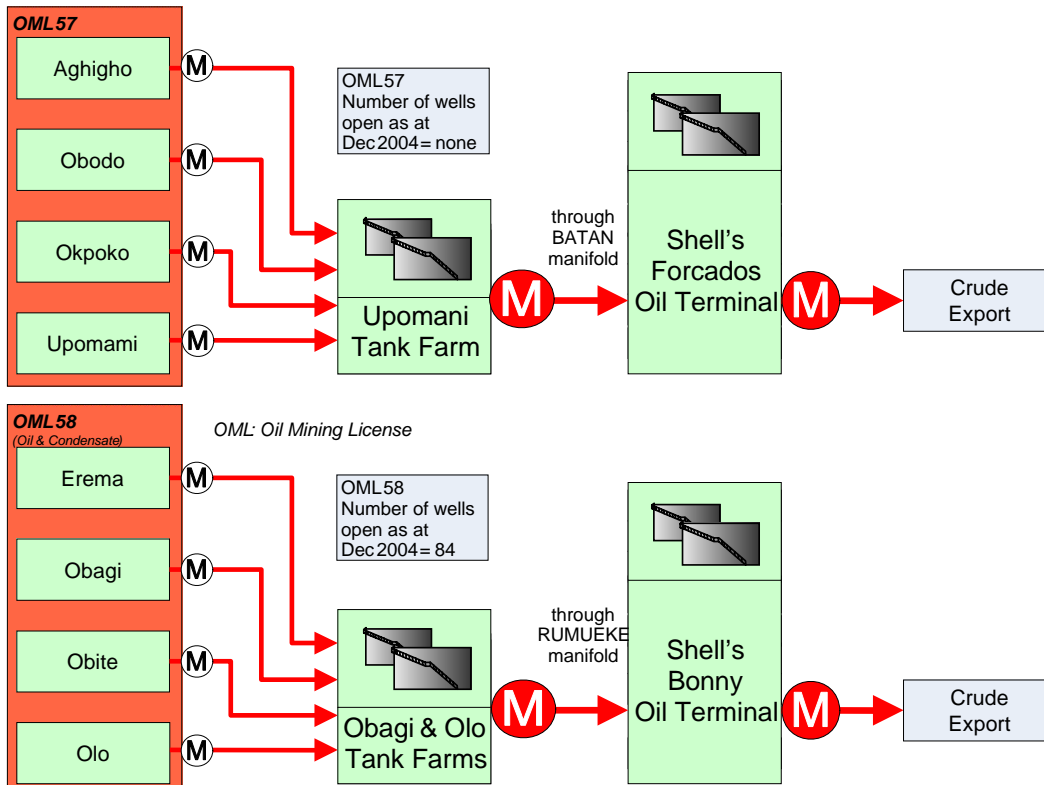
All Flow Stations are operated by Elf Petroleum Nigeria Limited (EPNL).

Onshore fields



The liquids pumped out of each Flow Station is metered as it leaves the station. This liquid is likely to be a mixture of oil & water. It is measured for field control reasons and is not to fiscal standards.

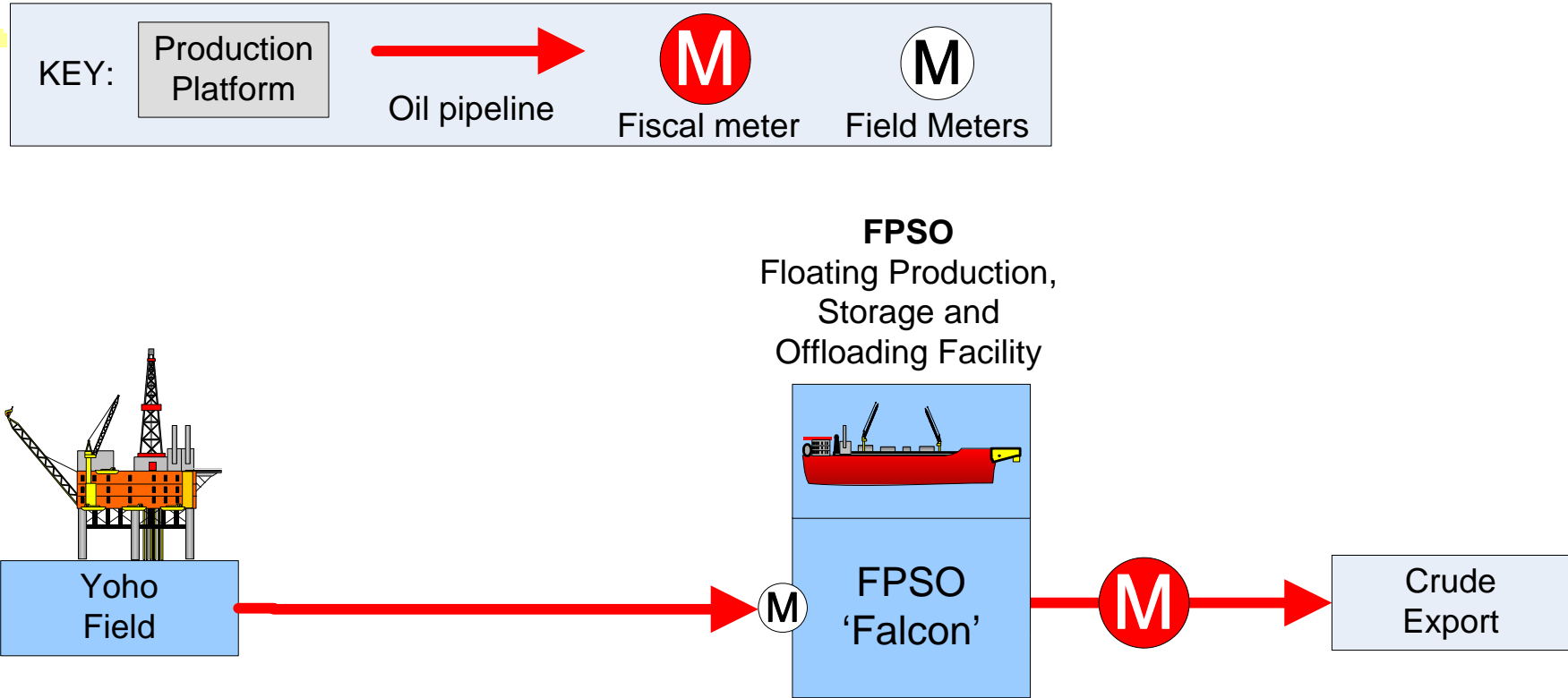
Oil leaving the tank farms is a 3rd party custody transfer into Shell's pipeline system & hence metered to fiscal standards.



# MOBIL PRODUCING NIGERIA

## FPSO 'Falcon' and its Gathering System

*Offshore field*



# Physical Audit

- Hydrocarbon mass balance / gross liquids mass balance – new (?)
- Metering limitations on measurement
- Royalty volume driven by metering
- PPT & Royalty volumes not agreed yet



# PPT and Royalty assessment

- Reconciliation to HCMB
- Reconciliation to Audited Accounts
- Clarification of point of Royalty assessment
- Receipts to be obtained in all cases
- Collection should encompass independent companies



| <b>Addax Knock Taggart</b>          | MM bbl    | 1999       | 2000        | 2001        | 2002        | 2003        | 2004        |
|-------------------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|
| Gross volumes from flowstations     |           | 9.5        | 10.8        | 13.2        | 16.0        | 18.6        | 21.3        |
| Water drained                       |           | -6.6       | -6.1        | -5.8        | -5.9        | -6.0        | -7.6        |
| <b>Gross after drainage</b>         |           | <b>2.9</b> | <b>4.7</b>  | <b>7.4</b>  | <b>10.1</b> | <b>12.6</b> | <b>13.7</b> |
| Spillages                           | no data   |            |             |             |             |             |             |
| Other losses                        | shrinkage | 0.0        | -0.1        | -0.3        | -0.4        | -0.7        | -0.9        |
| Difference on balance               |           | -0.1       | 0.0         | 0.1         | 0.1         | -0.1        | 0.0         |
| <b>Terminal Receipts (net oil)</b>  |           | <b>2.8</b> | <b>4.6</b>  | <b>7.2</b>  | <b>9.8</b>  | <b>11.8</b> | <b>13.2</b> |
| Stock change & third parties        | assumed   | -0.2       | 0.4         | -0.4        | 0.2         | 0.0         | -0.2        |
| Volumes to refineries               |           |            |             |             |             |             |             |
| Volumes to export                   |           | -2.6       | -5.0        | -6.6        | -10.0       | -11.6       | -13.0       |
|                                     |           |            |             |             |             |             |             |
|                                     |           |            |             |             |             |             |             |
| <b>Moni Pulo to Knock Taggart</b>   | MM bbl    | 1999       | 2000        | 2001        | 2002        | 2003        | 2004        |
| Gross volumes from flowstations     | no data   |            |             |             |             |             |             |
| Water drained                       | no data   |            |             |             |             |             |             |
| <b>Gross after drainage</b>         | no data   |            |             |             |             |             |             |
| Spillages                           | no data   |            |             |             |             |             |             |
| Other losses                        | no data   |            |             |             |             |             |             |
| Net oil                             |           | 5.3        | 8.0         | 9.1         | 8.1         | 6.7         | 5.8         |
| <b>Terminal Receipts (net oil)</b>  |           | <b>5.3</b> | <b>8.0</b>  | <b>9.1</b>  | <b>8.1</b>  | <b>6.7</b>  | <b>5.8</b>  |
| Stock change                        |           | -0.5       | 0.2         | 0.1         | 0.2         | 0.0         | -0.1        |
| Volumes to refineries               |           |            |             |             |             |             |             |
| Volumes to export                   |           | -4.8       | -8.2        | -9.2        | -8.3        | -6.7        | -5.7        |
|                                     |           |            |             |             |             |             |             |
|                                     |           |            |             |             |             |             |             |
| <b>Knock Taggart total</b>          | MM bbl    | 1999       | 2000        | 2001        | 2002        | 2003        | 2004        |
| Gross volumes from flowstations     |           | 9.5        | 10.8        | 13.2        | 16.0        | 18.6        | 21.3        |
| Water drained                       |           | -6.6       | -6.1        | -5.8        | -5.9        | -6.0        | -7.6        |
| <b>Gross after drainage</b>         |           | <b>2.9</b> | <b>4.7</b>  | <b>7.4</b>  | <b>10.1</b> | <b>12.6</b> | <b>13.7</b> |
| Spillages                           | no data   |            |             |             |             |             |             |
| Other losses                        | no data   |            |             |             |             |             |             |
| Net oil data plus other differences |           | 8.2        | 8.0         | 9.2         | 8.2         | 6.6         | 5.8         |
| <b>Terminal Receipts (net oil)</b>  |           | <b>8.1</b> | <b>12.6</b> | <b>16.3</b> | <b>17.9</b> | <b>18.5</b> | <b>19.0</b> |
| Stock change & third parties        |           | -0.7       | 0.6         | -0.3        | 0.4         | 0.0         | -0.3        |
| Volumes to refineries               |           | 0.0        | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Volumes to export                   |           | -7.4       | -13.2       | -16.0       | -16.3       | -18.5       | -18.7       |

# Limitations

- Net back method cannot indicate lost oil



# Physical audit - Process improvement

- DPR should take the lead on HCMB
- Consultation process
- Standards and Guidelines
- Reporting of HCMB should be introduced
- More / different? metering will be required



# Taxation and Royalty

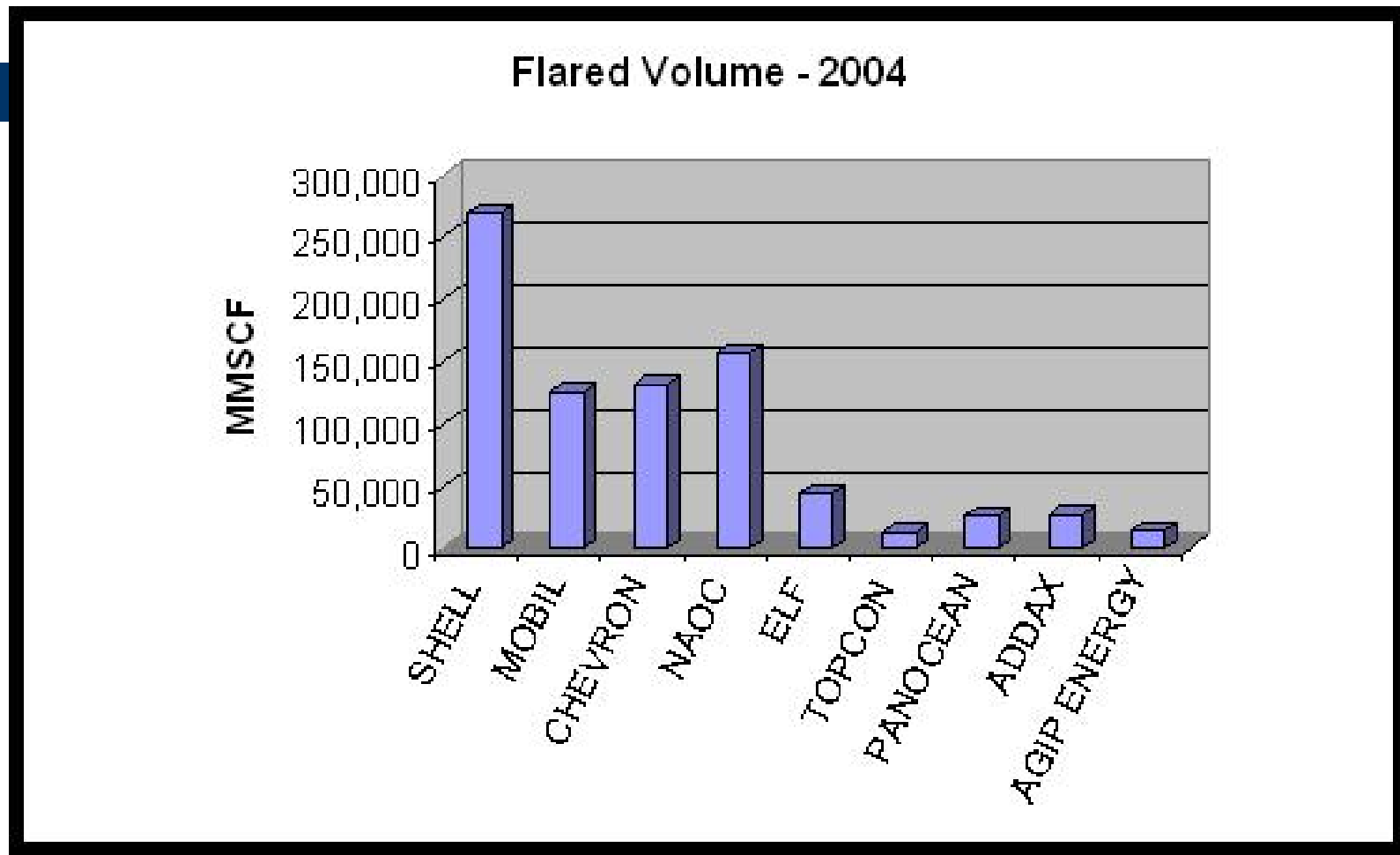
- Quantification of volumes
- DPR role & steps taken
- Computation of PPT liabilities
- Self-assessment
- FIRS role & steps taken



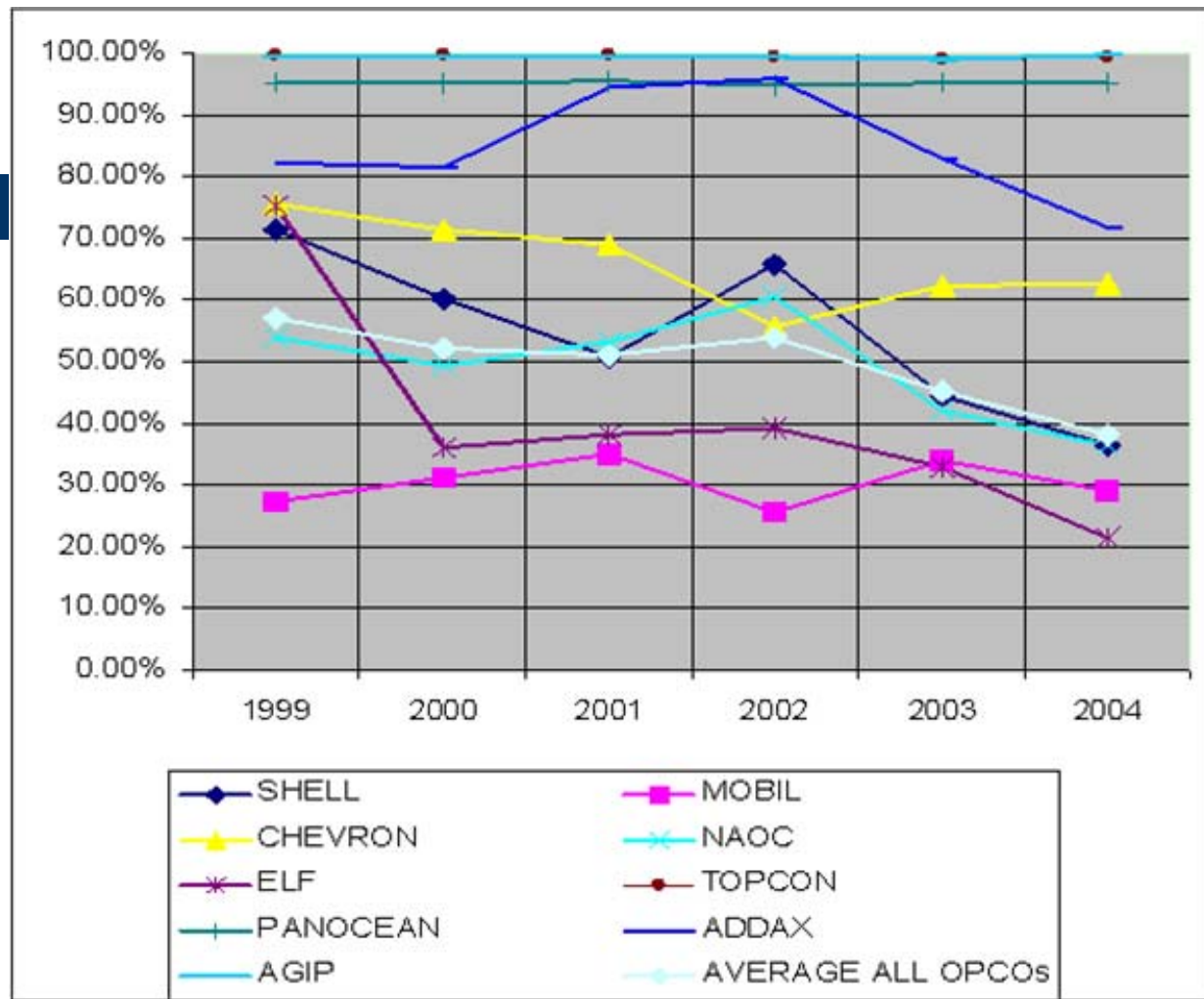
**Gas**



# Gas flared volumes



# Gas flaring trends



# Physical Audit - gas



- Lack of volume reconciliations in some areas
- Metering again
- Need a Regulator for Gas



# Gas sales

- Gas Act is in progress – good
- Pricing too low to support long term gas development?



# **Lifting and sale of crude**



# Lifting entitlement

- JV share
- Production Sharing Contracts
- Unitisation
- Carry agreements
- Complexity
- Records issue
- Exports have been materially reconciled

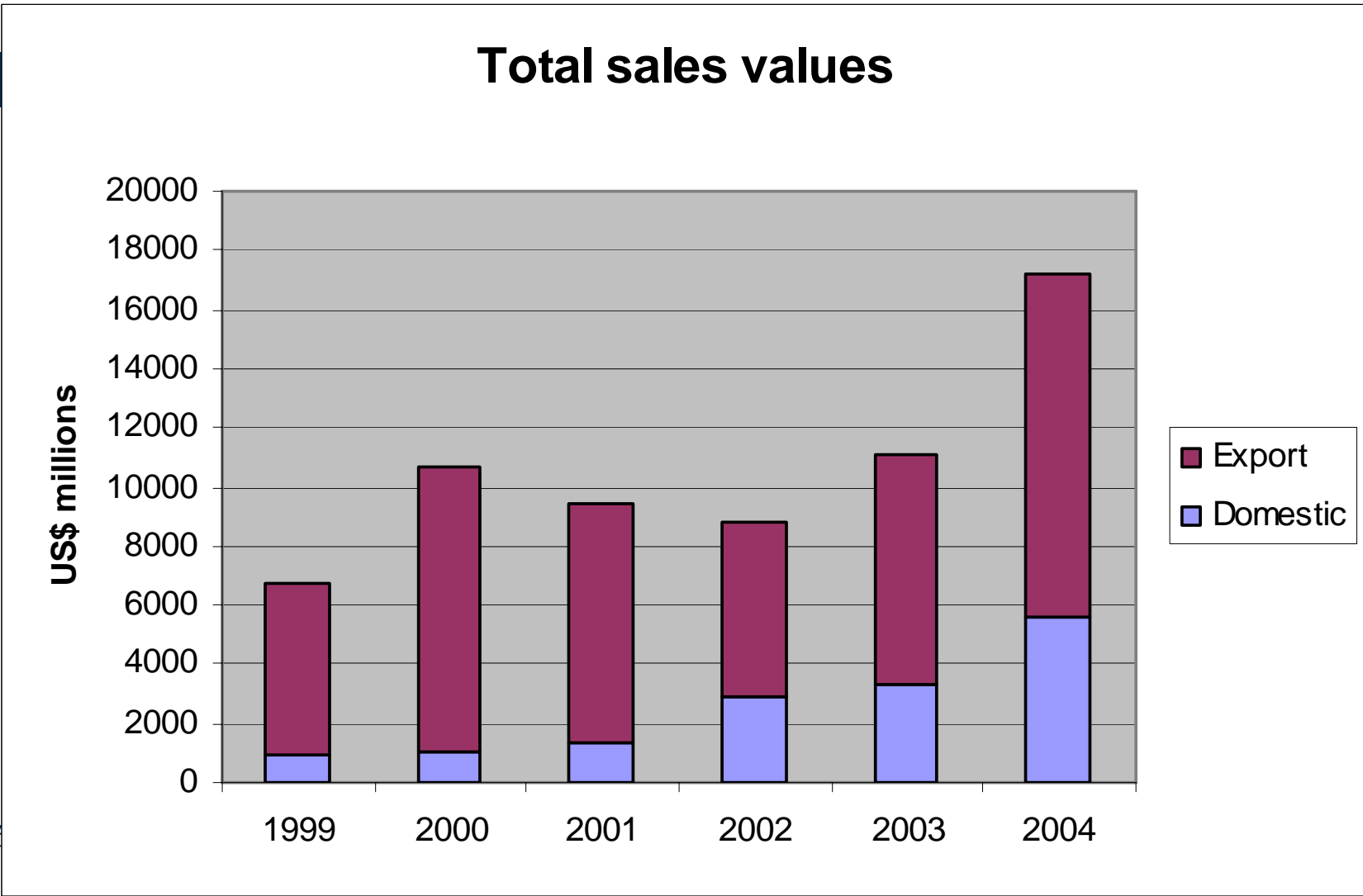


# Sale of equity crude

- Reliability of lifting
- Lack of written procedures
- Minor improvements to contract wording
- Setting the Official Selling Price
- The list of contract holders



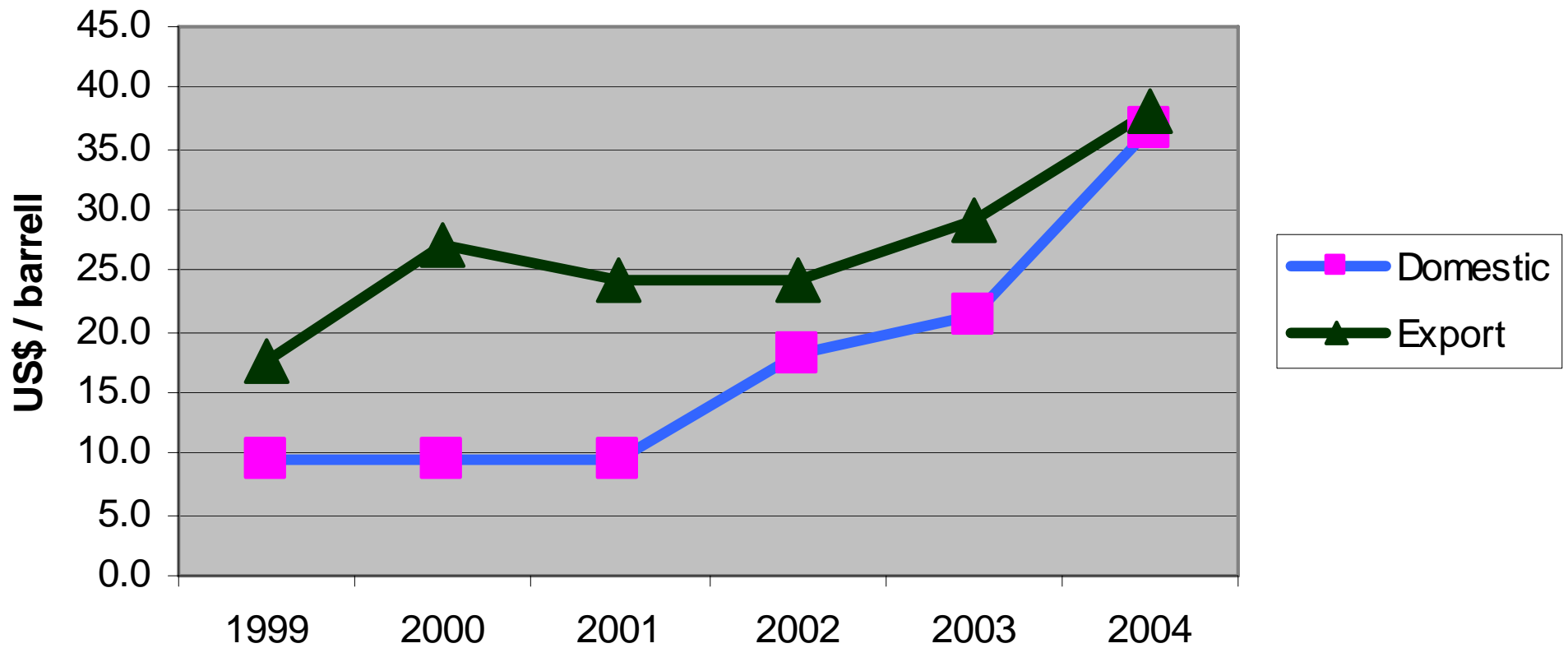
# Federation crude sales



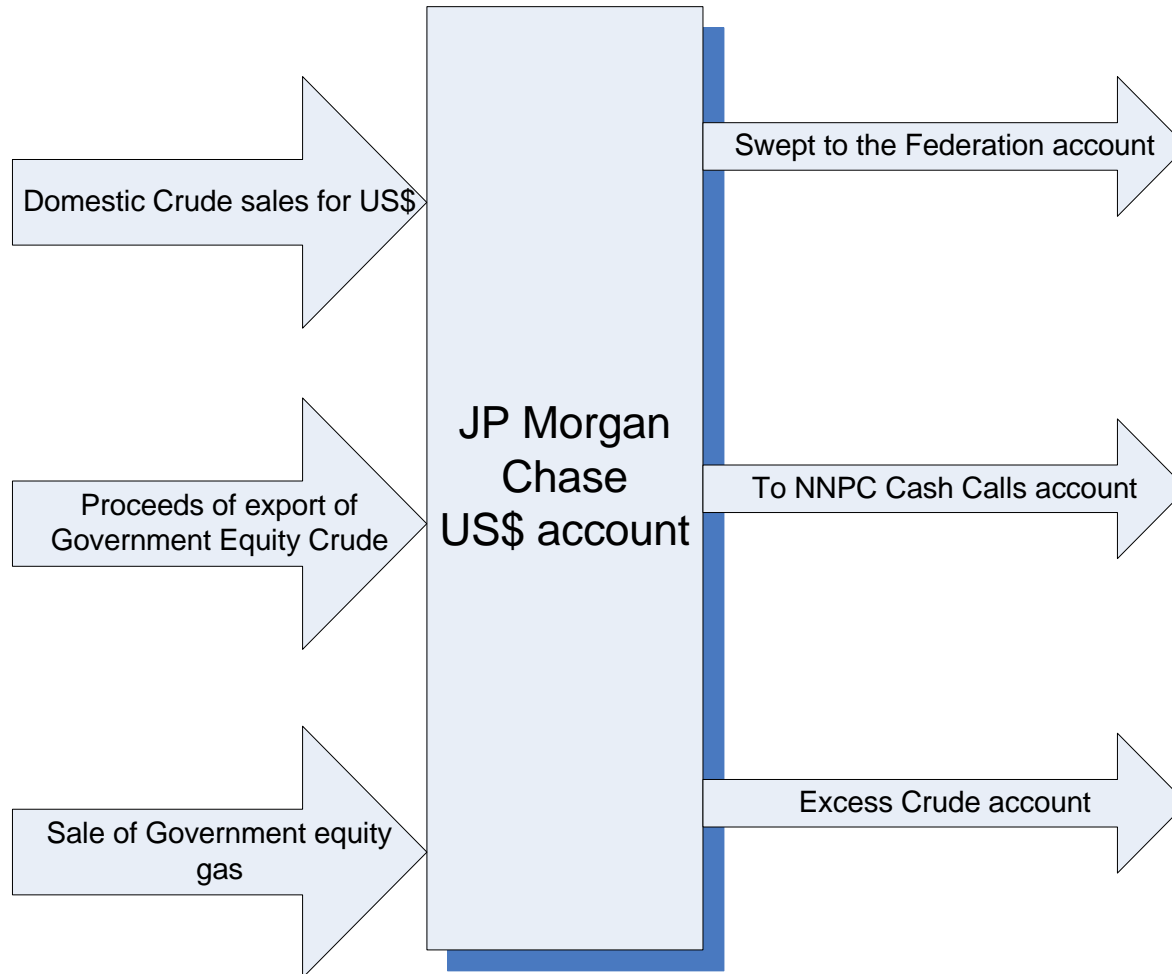
# Accounted equity crude sales volumes



# Average realised crude sales price



# Main transactions on the JP Morgan account

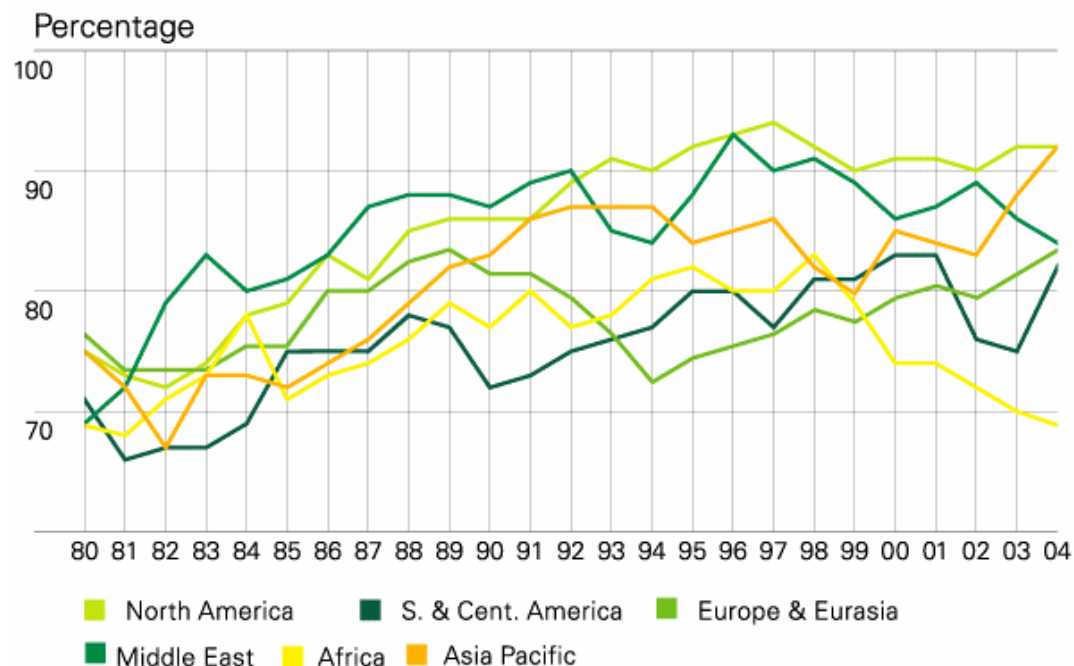


**Downstream**



# Refineries

## Oil refinery utilization



World refinery throughputs increased sharply in 2004 in response to very strong demand growth. The largest increases were in Asia Pacific, Europe and Eurasia, and South and Central America. As a result, global average refinery utilization increased to 87%, the highest level for at least 25 years.



# Process Audit: downstream

- Refinery poor performance, was not constrained by crude availability (1999-2004)
- Maintenance & management issues
- Authority limits (again)
- Product importation – tender for pricing
- Jetty capacity constraint

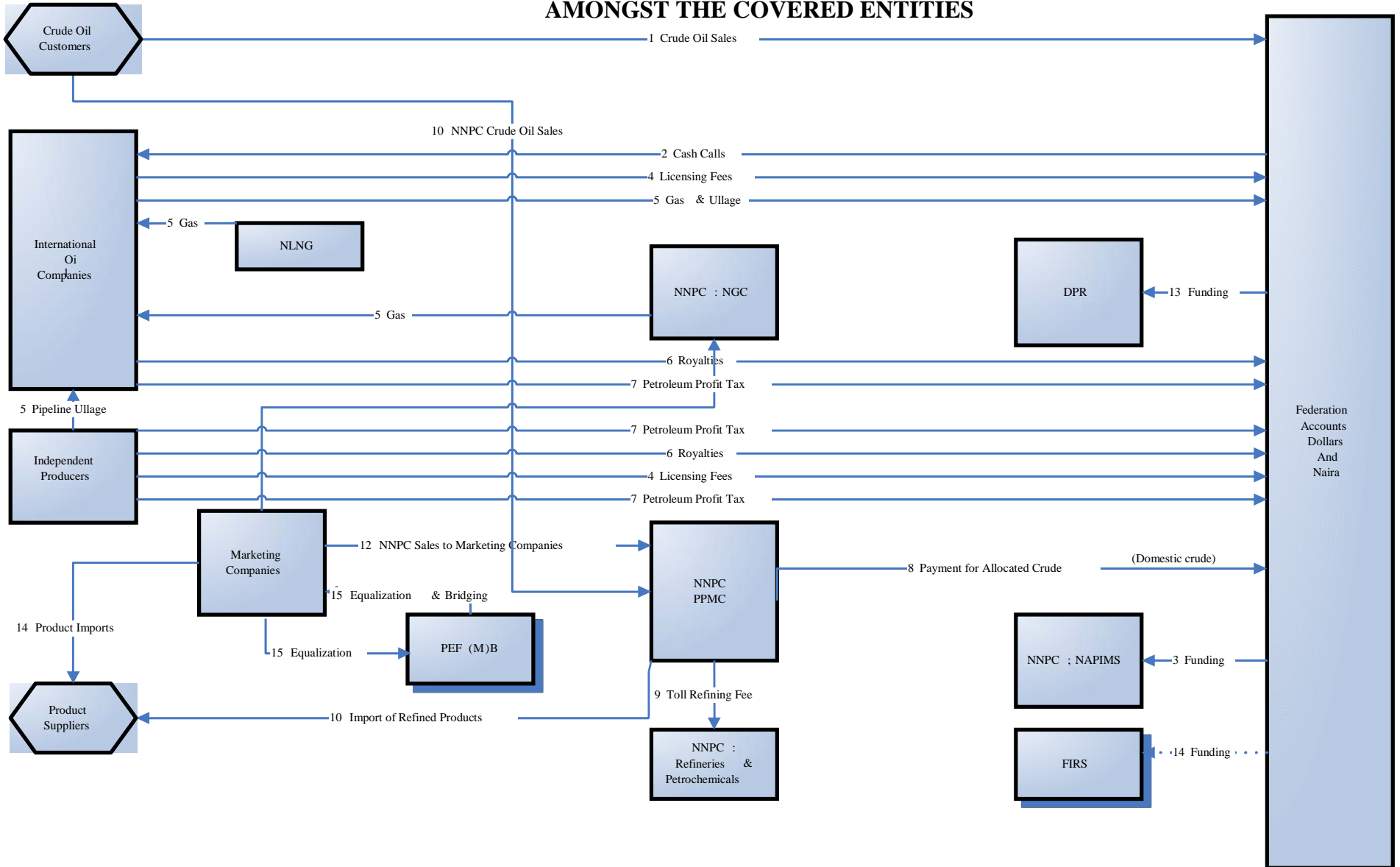


# Financial Overview



**Annex 1**

**Chart 1: MAPPING OF OIL AND GAS FINANCIAL FLOWS AMONGST THE COVERED ENTITIES**



# Financial Audit: clarification of roles

- Revenue Mobilisation Commission: monitoring
- Accountant General: managing
- Central Bank: banker
- Regulatory agencies: DPR & FIRS
- Companies: paying / receiving



# Net Inflows to the Federation

| <b>US\$ 000<br/>million</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Inflow                      | 8           | 16          | 17          | 12          | 16          | 27          |
| Outflow                     | -2          | -2          | -2          | -4          | -4          | -3          |
| Net inflow                  | 6           | 14          | 15          | 8           | 12          | 24          |

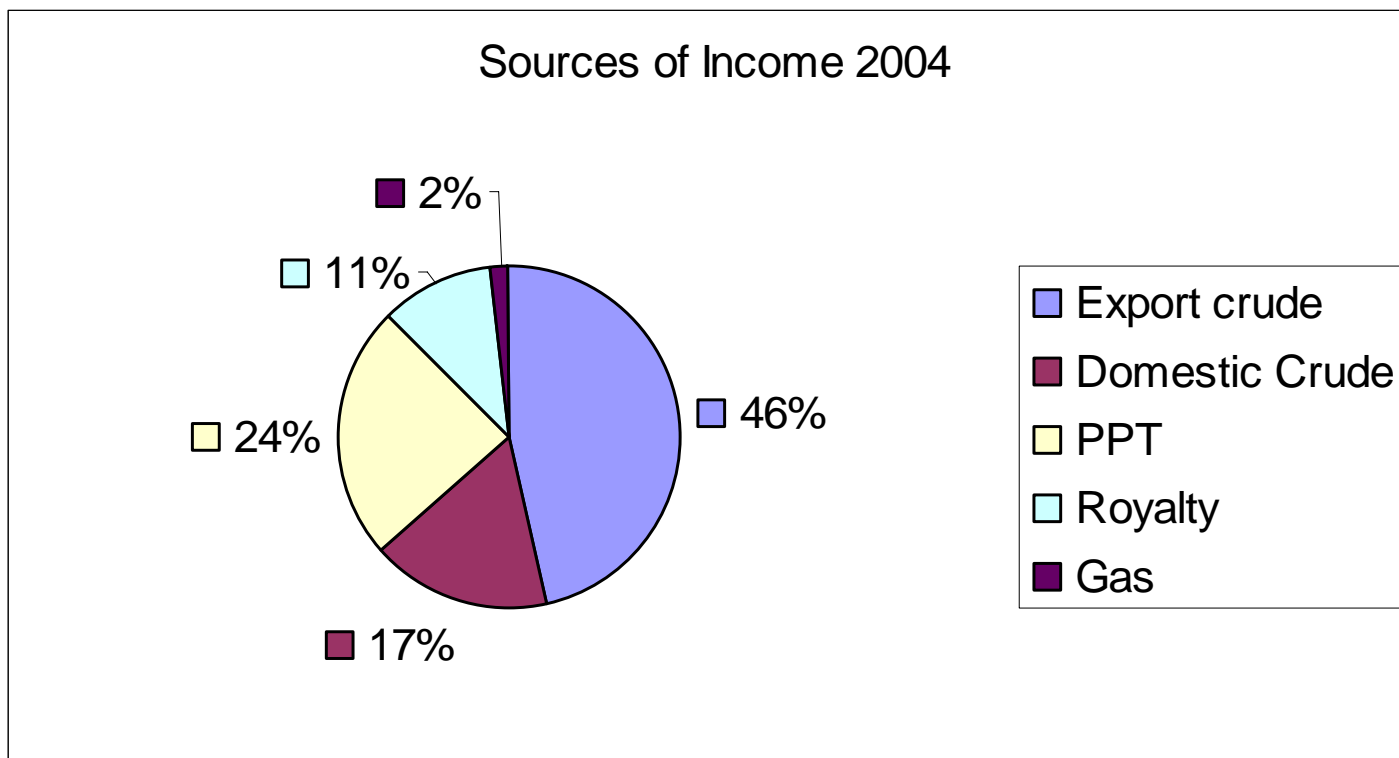


# Income to the Federation

|  |                  | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> | <u>2003</u> | <u>2004</u> |
|--|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Oil related flows                      |                  |             |             |             |             |             |             |
| from the sector                        | US \$ millions   | 1706        | 5179        | 5472        | 3030        | 5392        | 9699        |
| Non oil related                        | Naira (millions) | 4745        | 4607        | 5645        | 8747        | 10110       | 10493       |
| from the sector                        | US \$ millions   | 165         | 152         | 172         | 228         | 252         | 210         |
| Proceeds of sale of equity crude & gas | US \$ millions   | 5934        | 10247       | 11326       | 8142        | 10551       | 16433       |
| TOTALS                                 | Naira (millions) | 4745        | 4607        | 5645        | 8747        | 10110       | 10493       |
|  | US \$ millions   | 7805        | 15578       | 16970       | 11400       | 16195       | 26342       |



# Income sources in 2004



# Disaggregated flows

| US\$ millions                        | Reported aspaid by companies |             |             |             |             |             |
|--------------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
|                                      | 1999                         | 2000        | 2001        | 2002        | 2003        | 2004        |
| Petroleum Profits Tax                | 758                          | 3230        | 3615        | 1829        | 3225        | 6275        |
| Royalty                              | 888                          | 1781        | 1787        | 1368        | 1905        | 2813        |
| Gas flaring penalty                  | 24                           | 24          | 28          | 20          | 23          | 21          |
| Reserves Additional Bonus repayments | 61                           | -           | -           | -           | -           | 274         |
| Signature bonuses on license award   | 25                           | -           | 137         | 37          | 235         | 53          |
| <b>TOTAL</b>                         | <b>1756</b>                  | <b>5035</b> | <b>5567</b> | <b>3254</b> | <b>5388</b> | <b>9436</b> |

| US\$ millions                        | As Recorded by CBN |             |             |             |             |             |
|--------------------------------------|--------------------|-------------|-------------|-------------|-------------|-------------|
|                                      | 1999               | 2000        | 2001        | 2002        | 2003        | 2004        |
| Petroleum Profits Tax                | 659                | 3286        | 3549        | 1698        | 3287        | 6557        |
| Royalty                              | 939                | 1871        | 1761        | 1275        | 1832        | 2787        |
| Gas flaring penalty                  | 22                 | 22          | 25          | 20          | 38          | 28          |
| Reserves Additional Bonus repayments | 61                 | -           | -           | -           | -           | -*          |
| Signature bonuses on license award   | 25                 | -           | 137         | 37          | 235         | 53          |
| <b>TOTAL</b>                         | <b>1706</b>        | <b>5179</b> | <b>5472</b> | <b>3030</b> | <b>5392</b> | <b>9425</b> |

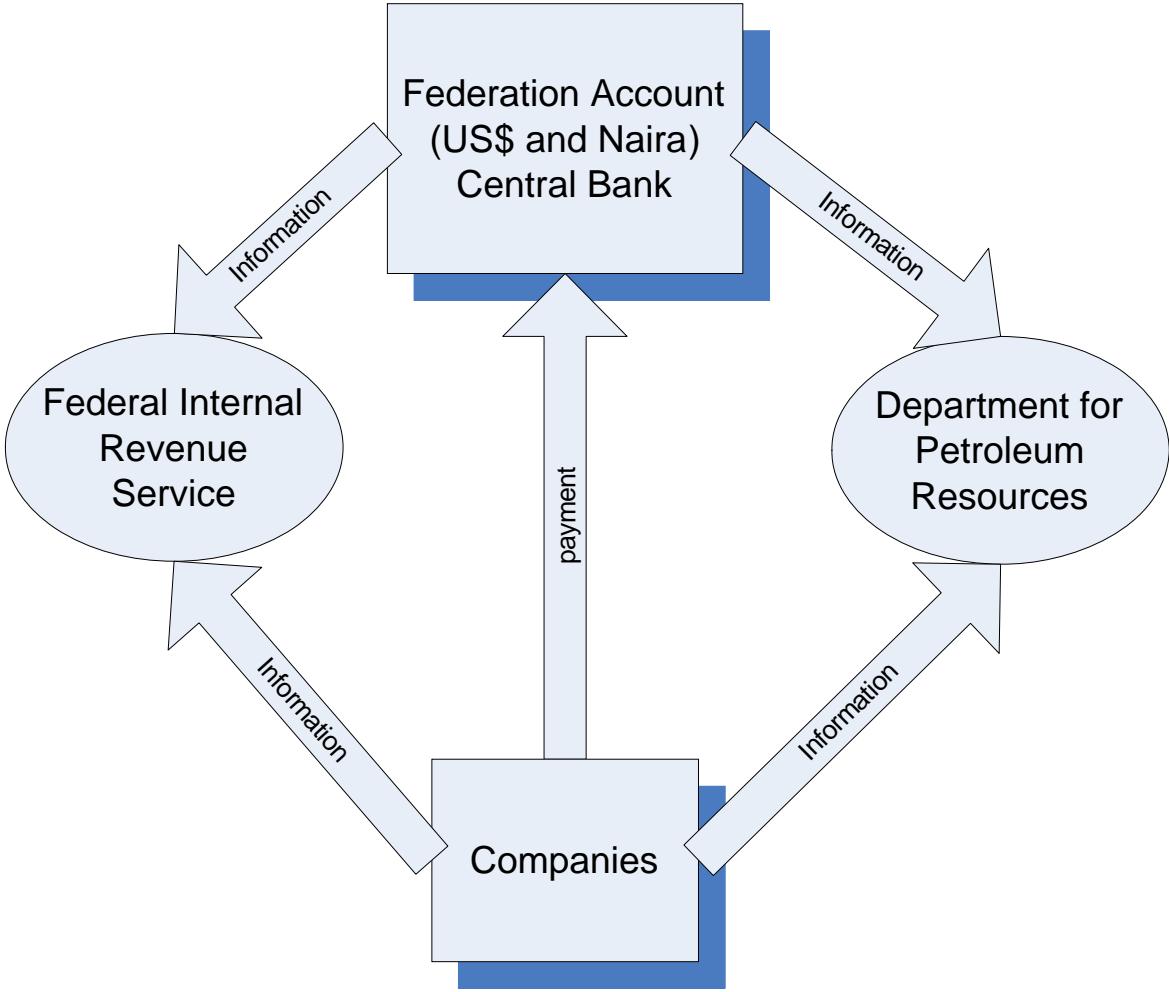


# Niger Delta Development Commission

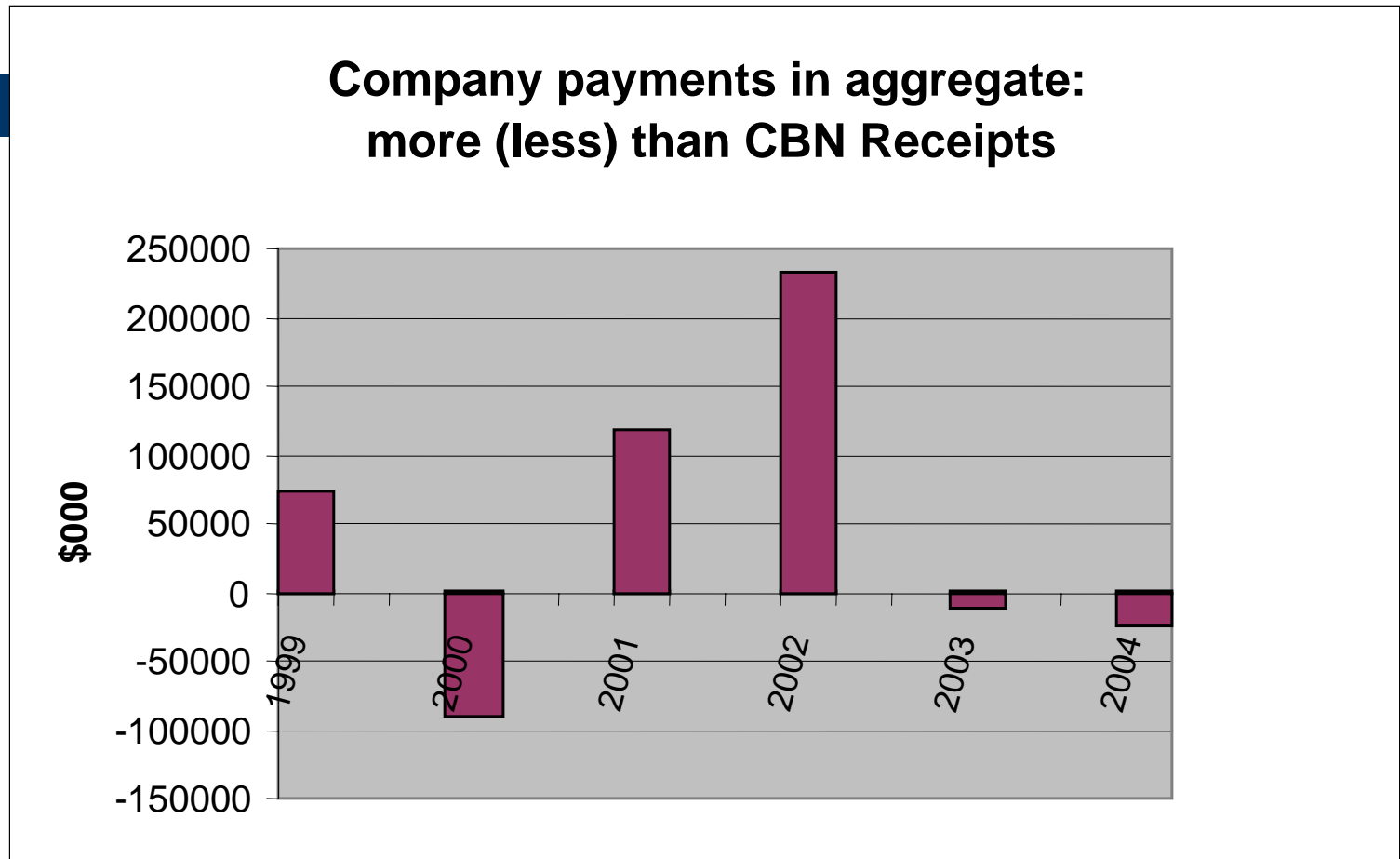
|                  | 2001      |        | 2002      |        | 2003      |        | 2004      |         |
|------------------|-----------|--------|-----------|--------|-----------|--------|-----------|---------|
|                  | N         | \$     | N         | \$     | N         | \$     | N         | \$      |
| <b>SPDC</b>      | 2,316,252 | 43,121 | 2,665,210 | 38,669 | 2,970,867 | 38,265 | 3,487,207 | 43,304  |
| <b>MOBIL</b>     | 316,030   | 7,471  | 383,651   | 10,640 | 404,551   | 13,304 | 494,656   | 9,465   |
| <b>CNL</b>       | 373,515   | 7,825  | 390,120   | 6,540  | 384,687   | 7,941  | 411,211   | 6,457   |
| <b>COCNL</b>     | 25,284    | 413    | 10,070    | 492    | 39,081    | 737    | 6,167     | 84      |
| <b>TOPCON</b>    | 19,634    | 362    | 10,070    | 492    | 39,081    | 737    | 6,167     | 84      |
| <b>ELF</b>       | 553,233   | 8,181  | 588,869   | 8,245  | 714,797   | 13,185 | 1,272,813 | 32,968  |
| <b>NAOC</b>      | 148,742   | 2,217  | 209,247   | 2,827  | 232,715   | 2,830  | 362,322   | 5,113   |
| <b>NAE</b>       | 0         | 0      | 0         | 0      | 0         | 0      | 65,007    | 6,814   |
| <b>AENR</b>      | NTP       | NTP    | NTP       | NTP    | NTP       | NTP    | NTP       | NTP     |
| <b>EXPRESS</b>   |           | 535    |           | 572    |           | 703    |           | 519     |
| <b>ADDAX</b>     | NIL       | 320    | NIL       | 200    | NIL       | 675    | NIL       | 26,124  |
| <b>POOCNL</b>    | 21,800    | 61     | 33,504    | 76     | 18,195    | 420    | 127,378   | 1,701   |
| <b>DUBRI</b>     | 2,933     | 0      | 0         | 0      | 0         | 0      | 0         | 0       |
| <b>CON OIL</b>   | 0         | 320    | 0         | 59     | 0         | 600    | 0         | 600     |
| <b>OCEAN E.</b>  | N/A       | N/A    | N/A       | N/A    | N/A       | N/A    | N/A       | N/A     |
| <b>POCL</b>      | 83,335    | 1,983  | 135,343   | 2,673  | 165,111   | 2,807  | 173,438   | 2,505   |
| <b>AMNI</b>      | NIL       | NIL    | NIL       | NIL    | NIL       | NIL    | NIL       | NIL     |
| <b>MONI PULO</b> | NIL       | NIL    | NIL       | NIL    | NIL       | NIL    | NIL       | NIL     |
| <b>STATOIL</b>   | N/A       | N/A    | N/A       | N/A    | N/A       | N/A    | N/A       | N/A     |
| <b>NPDC</b>      | 160,511   | 0      | 71,201    | 0      | 58,724    | 0      | 0         | 0       |
| <b>TOTAL</b>     | 4,021,269 | 72,809 | 4,497,285 | 71,485 | 5,027,809 | 82,204 | 6,406,366 | 135,738 |



# Reconciliation illustration



# Financial differences: up to 2%



# Financial audit – issues for auditors

- Accruals basis – continuing problem
- Entity desire to be exonerated
- Entity view of Materiality
- Implications for reconciliation process



# Financial Audit - Issues

- PPT & Royalty assessments
- FIRS initiative
- AGF vs CBN comparison
- CBN records incomplete / inaccessible for early years
- Institutional arrangements to be fixed



# Income management issues arising from the financial audit

- Central management is weak
- Role of Accountant General should be reinforced
- CBN records incomplete for early years
- Information systems inadequate



**Thank you.**

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