IEA energy statistics

Monthly Oil Statistics
The Joint Oil Data Initiative

IEA Data Training Workshop in South Africa

11-13 October 2010

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International Energy Agency

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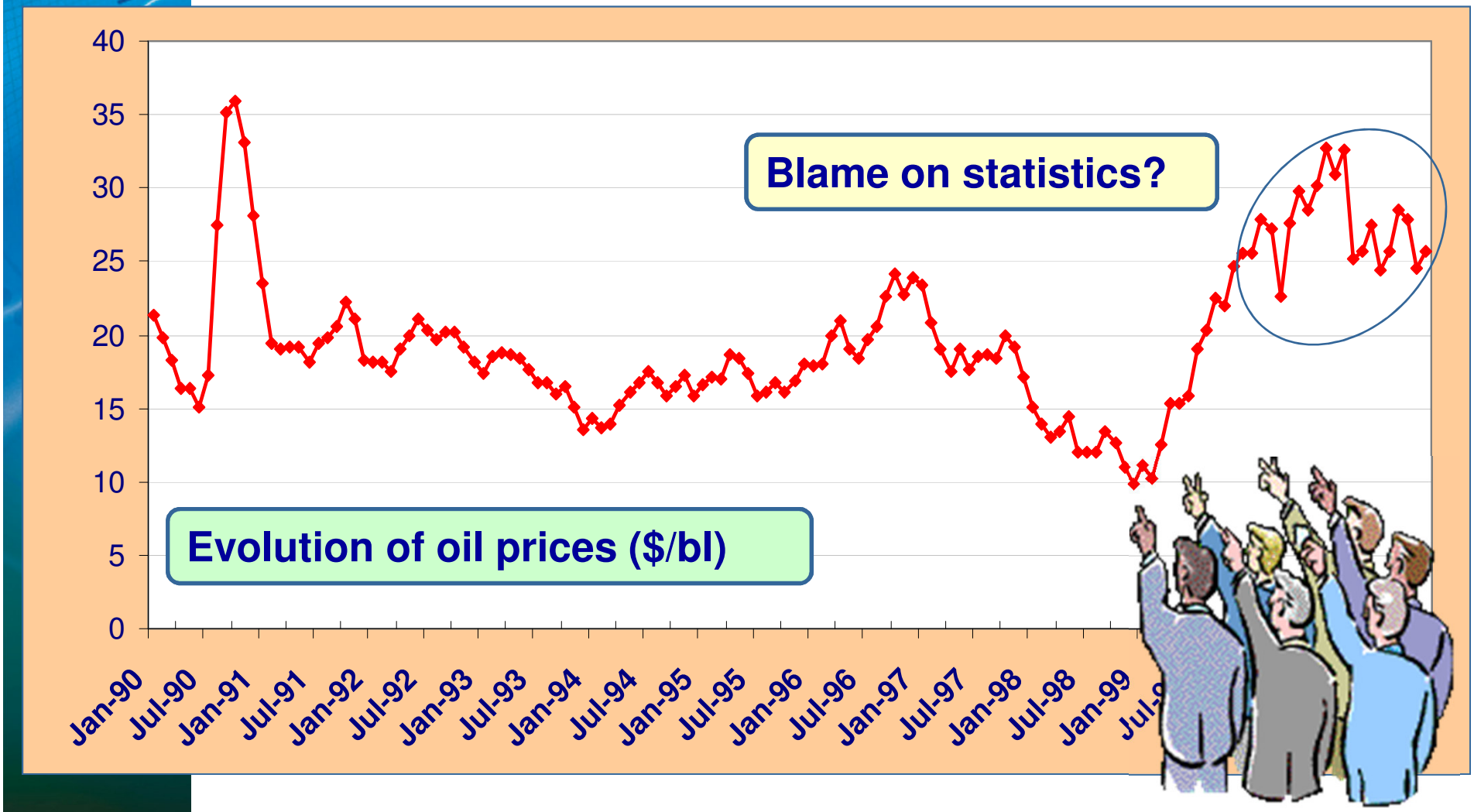
The importance of monthly oil statistics



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The Joint Oil Data Initiative

An important contribution to better oil statistics and transparency

- At the end of the 1990s, some analysts blamed high volatility in oil prices on lack of transparent oil data for the world. Availability, data quality, timeliness and coverage were major issues.
- APEC, Eurostat, IEA, OLADE, OPEC and UNSD took up the challenge to improve transparency and agreed on a common reporting mechanism.
- In 2005 the IEF Secretariat took over the co-ordination of the Initiative.
- Over 90 countries are now participating in the Initiative

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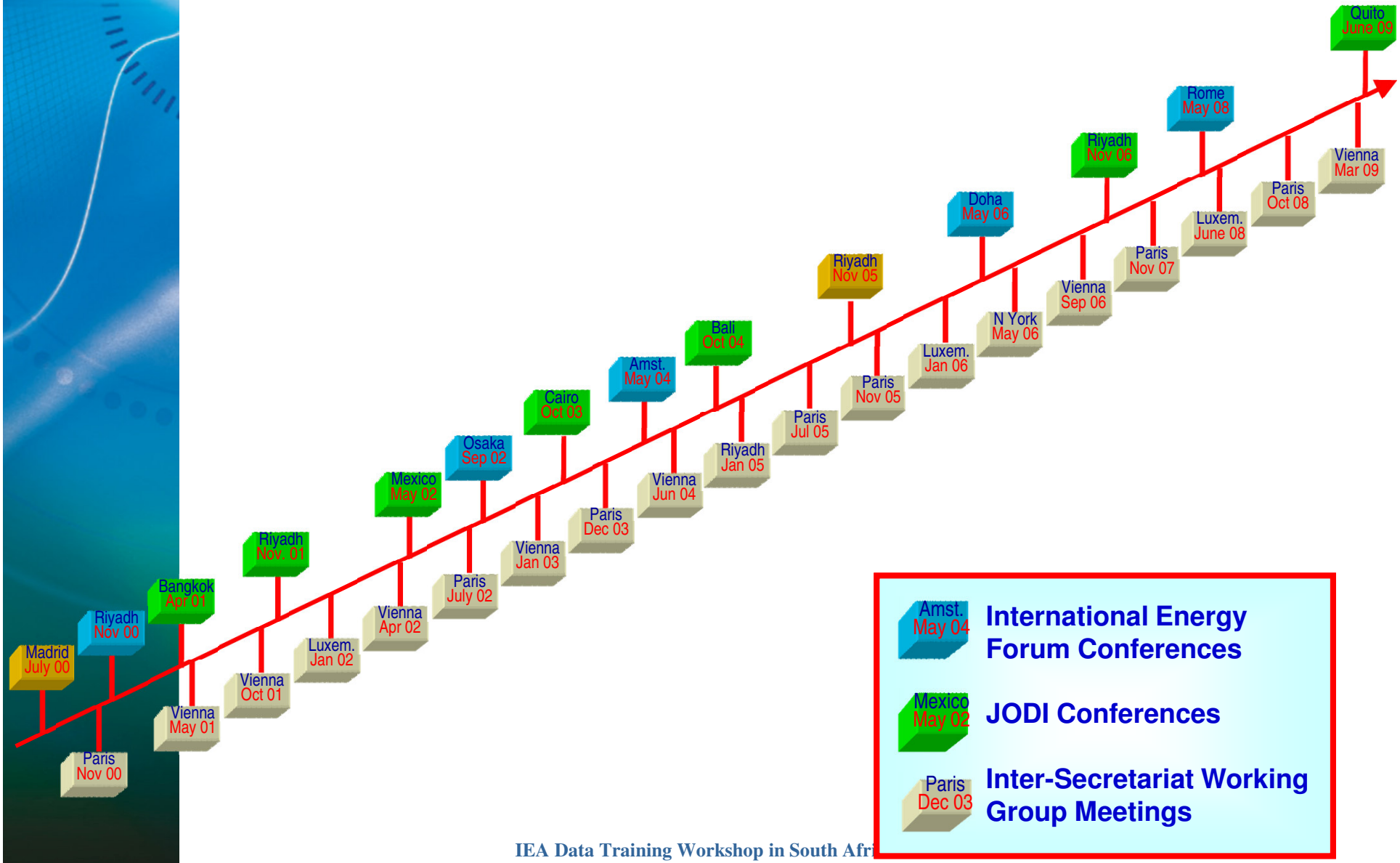
JODI: A ten-year fast growing initiative



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The initial JODI format

Country:
Month:

A Simple Format
(42 data points)

Unit:

Month -1 and Month -2

		Crude Oil
Production		
Imports		
Exports		
Stocks	Closing	
	Change	
Refinery Intake		

		Petroleum Products					
		LPG	Gasoline	Kerosene	Gas/Diesel Oil	Fuel Oil	Total Oil
Refinery Output							
Imports							
Exports							
Stocks	Closing						
	Change						

Choice of units left to organisations

Simple
Definitions

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From Jodi to Maxi Jodi

NGL and Other Non crude production have been added

Kerosene is also used for cooking and lighting in Asia, Africa and Latin America, so the need to differentiate jet kerosene from other kerosene

Month _____

	Crude Oil	NGL	Other	Total			Petroleum Products								
							LPG	Naphtha	Gasoline	Jet Kerosene	Kerosene	Gas/ Diesel Oil	Fuel Oil	Other Products	Total Products
Production					Refinery Output										
From Other sources					Receipts										
Imports					Imports										
Exports					Exports										
Product Transfers Backflows					Products Transfers										
Direct Use					Inter Products Transfers										
Stocks	Closing				Stocks	Closing									
	Change					Change									
Statistical Difference					Statistical Difference										
Refinery Demand					Demand										

Addition of a few technical flows to be able to make a full oil balance

Naphtha accounts for a large share of other products, so the need to have a special column to report naphtha

Other

Receipts = Primary Product Receipts +

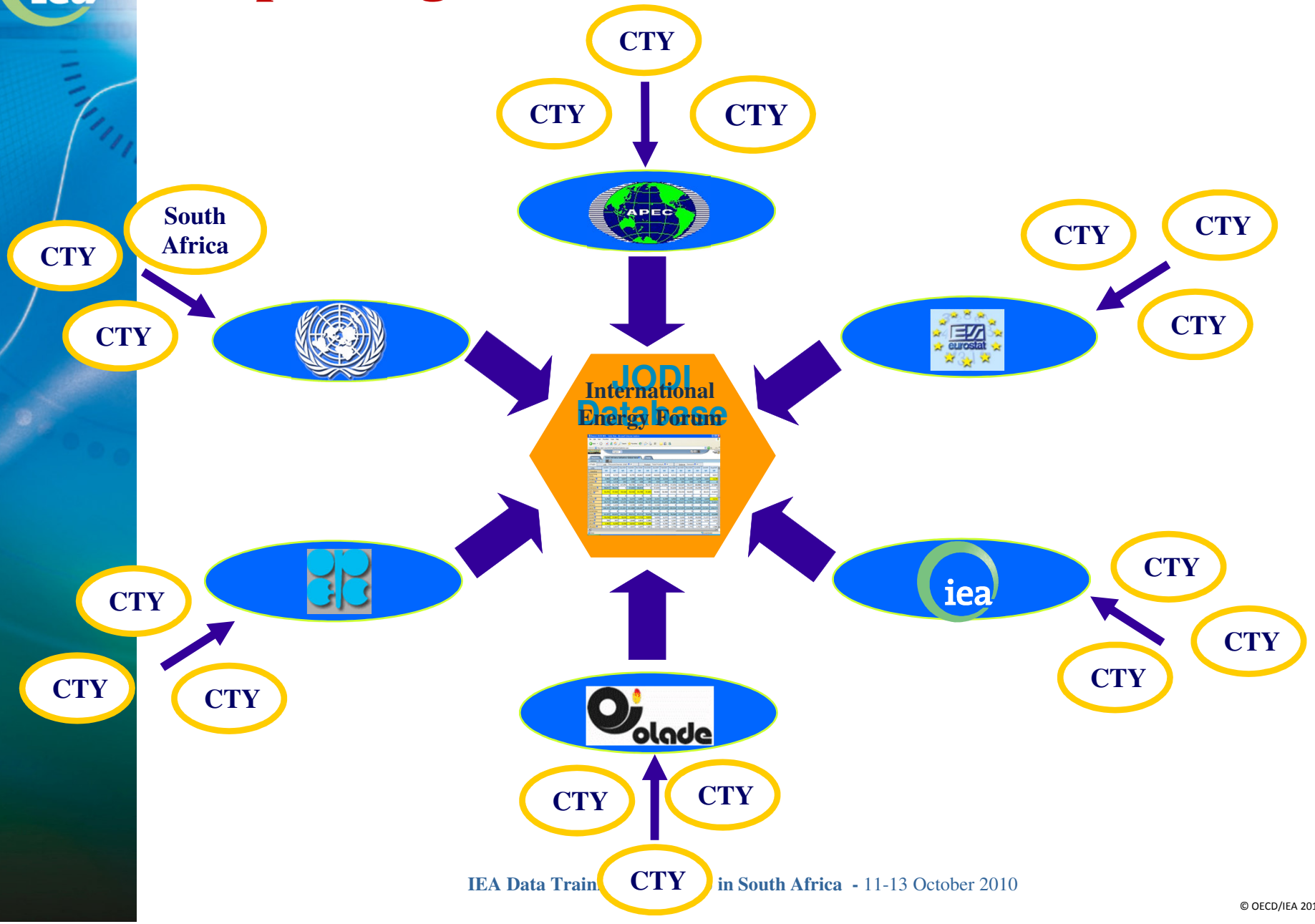
Other Products= Refinery gas + Ethane

Petroleum Products

Total = 128 cells or 86 new cells

= New Cells'

Reporting Mechanism



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A global database is updated every month

Beyond 20/20 WDS - Table View - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://iefs-cmnn/WDS/TableViewer/tableView.aspx

Beyond 20/20 WEB DATA SERVER — English — Powered by Beyond 20/20

Reports | Joint Oil Data Initiative Global data | Help

Actions

OTHER: Unit - Thousand Barrels (kbbl) | Product - Total Products | Balance - Demand

TIME / Country	Jul2004	Aug2004	Sep2004	Oct2004	Nov2004	Dec2004	Jan2005	Feb2005	Mar2005	Apr2005	May2005	Jun2005	Jul2005	Aug2005
Hong Kong China	9,978	9,737	9,818	8,795	10,067	10,087	10,810	8,426	8,513	8,279	9,435	8,322	8,320	8,917
Hungary	3,902	4,018	4,047	4,388	4,316	4,482	3,750	3,518	4,105	4,120	4,526	4,279	4,627	4,120
Iceland	645	1,118	533	510	630	105	653	345	615	263	548	518	698	0
India	71,116	61,773	67,294	70,736	68,626	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	67,088
Indonesia	38,037	36,270	0	37,603	36,810	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0
Iran (Islamic Rep.)	33,294	37,262	35,340	35,340	35,700	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	41,819
Iraq	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ireland	4,762	4,790	5,191	5,473	4,881	5,670	5,121	5,339	5,945	4,952	4,938	5,530	4,649	5,241
Italy	59,715	52,889	57,379	58,602	54,046	58,187	52,416	51,878	56,586	52,613	51,936	52,205	55,036	51,041
Jamaica	1,188	1,123	995	1,170	1,204	124	1,145	1,145	0	0	0	0	0	0
Japan	160,497	166,360	151,021	161,008	158,607	187,922	183,288	177,169	189,948	157,929	144,998	154,802	157,841	158,375
Kazakhstan	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0
Korea	61,557	65,631	64,743	69,214	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	61,557	65,600
Kuwait	10,230	11,067	8,640	8,928	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11,377	12,183
Latvia	704	837	829	1,048	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,134	1,212
Libya	5,983	6,293	5,550	6,634	6,660	6,386	7,533	6,356	7,285	7,080	7,006	6,780	0	0
Lithuania	1,775	1,947	1,939	1,837	1,697	1,861	1,533	1,548	1,736	1,689	1,775	1,767	1,814	1,986

Monthly update, M-1 data (most recent month available: August 2010)

Color code indicating data comparability (blue, yellow, white)

Done — Local intranet

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How to communicate results of country participation to Ministers

- **Results visible rapidly**
- **Results on a country basis**
- **A measure easy to understand**
- **Objective criteria: timeliness, sustainability and completeness**

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	S	T	C
Algeria	☺	☹	☺
Angola	☹	☹	☺
Argentina	☺	☹	☺
Australia	☺	☺	☺
Austria	☺	☺	☺
Azerbaijan	☺	☺	☺
Bahrain	☺	☺	☺
Barbados	☺	☺	☺
Belgium	☺	☺	☺
Bolivia	☺	☺	☺
Brazil	n.a.	n.a.	n.a.
Brunei Darussalam	☺	☺	😐
Bulgaria	☺	☺	☺
Canada	☺	☺	☹
Chile	☺	☺	☺
China	n.a.	n.a.	n.a.
Chinese Taipei	☹	☹	😐
Colombia	☺	☹	☺
Costa Rica	☺	☺	☺
Croatia	n.a.	n.a.	n.a.
Cuba	☹	☹	☹
Cyprus	n.a.	n.a.	n.a.
Czech Republic	☺	☺	☺
Denmark	☺	☺	☺
Dominican Republic	☹	☹	☹
Ecuador	☹	☹	☹
Egypt (A.R.)	☺	☹	☹
El Salvador	☹	☹	☹
Estonia	n.a.	n.a.	n.a.
Finland	☺	☺	😐
France	☺	☺	😐
Gabon	☹	☹	☹

	S	T	C
Germany	☺	☺	☺
Greece	☺	☺	☺
Grenada	☹	☹	☹
Guatemala	☹	☹	☹
Guyana	☹	☹	☹
Haiti	☺	☺	☺
Japan	☺	☺	☺
Kazakhstan	☺	😐	☹
Korea	☺	☺	☺
Kuwait	☺	☺	☺
Latvia	n.a.	n.a.	n.a.
Libya	☺	☺	😐
Lithuania	n.a.	n.a.	n.a.
Luxembourg	☺	☺	☺
Malaysia	☺	☹	😐
Malta	n.a.	n.a.	n.a.
Mexico	☺	☺	☺
Myanmar	☺	☹	☺
Netherlands	☺	😐	☺
New Zealand	☺	☺	☺
Nicaragua	☺	☹	☺
Nigeria	☺	☹	☺

	S	T	C
Norway	☺	☺	☺
Oman	☹	☹	☹
Panama	☹	☹	☹
Papua New Guinea	☺	☹	☹
Paraguay	😐	☹	😐
Peru	☺	☹	☺
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Spain	😐	😐	☺
Surinam	☹	☹	☹
Sweden	☺	☺	☺
Switzerland	☺	☺	☺
Syria (A.R.)	☹	☹	☹
Thailand	☺	☺	☺
Trinidad & Tobago	☹	☹	☹
Turkey	☺	☺	☺
United Arab Emirates	☺	😐	😐
United Kingdom	☺	😐	☺
United States	☺	☺	☺
Uruguay	☺	☹	☺
Venezuela	☺	☺	☺
Vietnam	☺	😐	😐
Yemen	☹	☺	☹

World Summary	☺	😐	☹
Sustainability	64 53	4	20
Timeliness	43 44	7	38
Completeness	50 46	14	24

Smiley Faces Report shown at IEF Ministerial meetings

What is the overall situation in terms of sustainability, timeliness and completeness ?

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South Africa – JODI assessment Smiley Faces

- **Timeliness: The JODI database is expected to be updated regularly. Timeliness indicates whether submissions were submitted at the expected deadline over a six months period**
  - "good" when 6 submissions received within two months after the end of the reference month ;
  - "fair" when 4 or 5 submissions received ;
  - "less reliable" when less than 4 submissions received .
- **Completeness** … **d data points out of the maximum 42 i** … **e filled in.**
  - "good" when … production, stock change/closin
  - "fair" when b … n ;
  - "less reliable' … .
- **Sustainability (submissions): the number of the JODI data submission within a six-month period:**
  - "good" if the 6 questionnaires have been submitted ;
  - "fair" if 4 or 5 questionnaires have been submitted ;
  - "less reliable" when less than 4 questionnaires have been submitted .

South Africa Assessment

Sustainability	☺
Timeliness	☹
Completeness	☺

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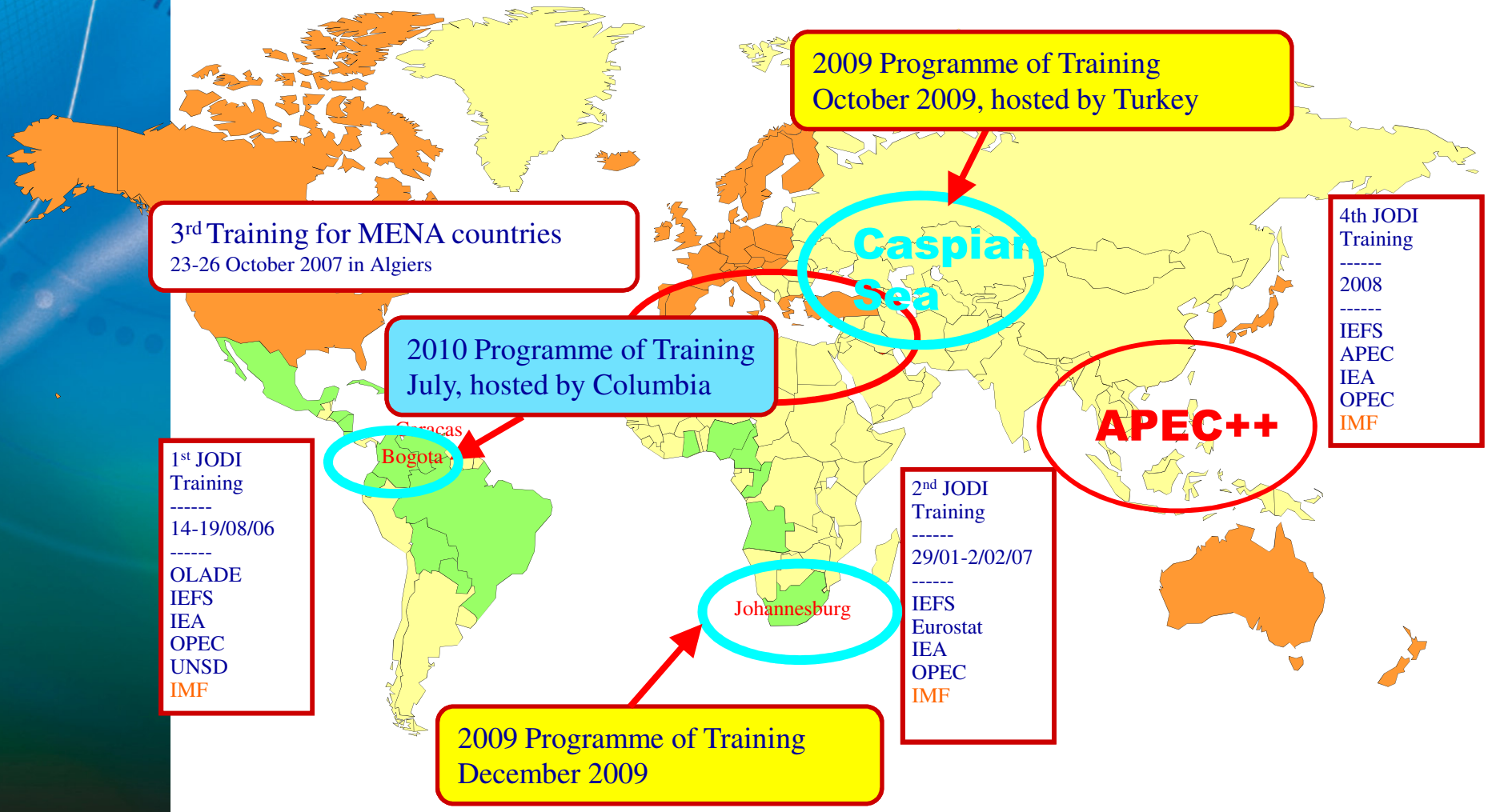
Seven training sessions were organised on JODI (including two in South Africa)



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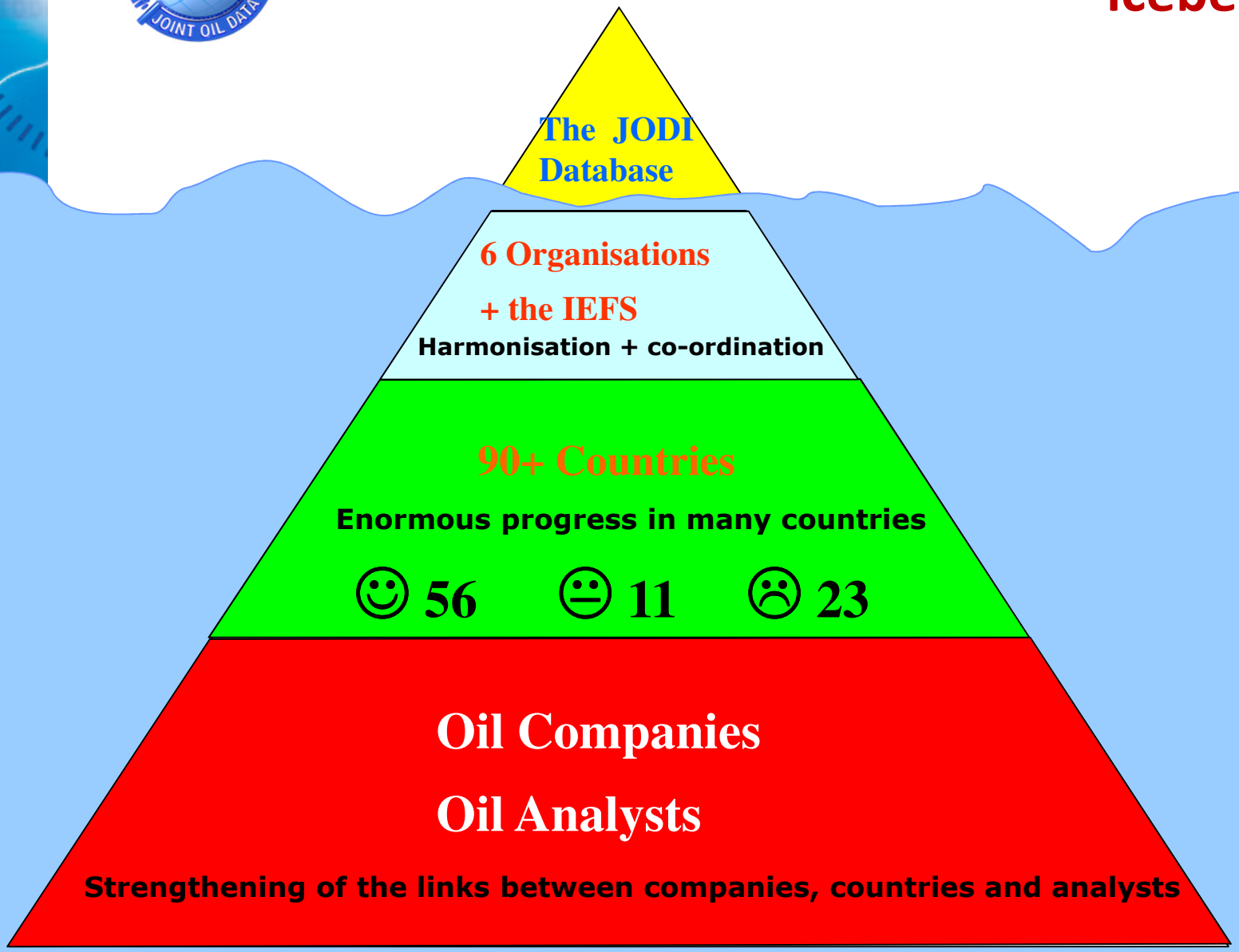
The database is only the visible part of the iceberg…



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JODI has certainly contributed to raise political awareness…

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The Joint Oil Data Initiative

What next?

- ✓ Submissions: continue to improve timeliness, coverage and sustainability
- ✓ Continue to develop and improve the quality of the JODI World database.
- ✓ Some key **data** are still missing e.g. stock levels for China and India
- ✓ Improve maxi Jodi questionnaire in order to have a complete balance and more information on key oil products
- ✓ Expansion to other fuels: Gas Jodi

http://www.jodidata.org/

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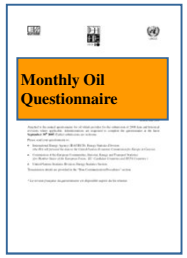
A few words on the importance of oil for the IEA

The International Energy Program

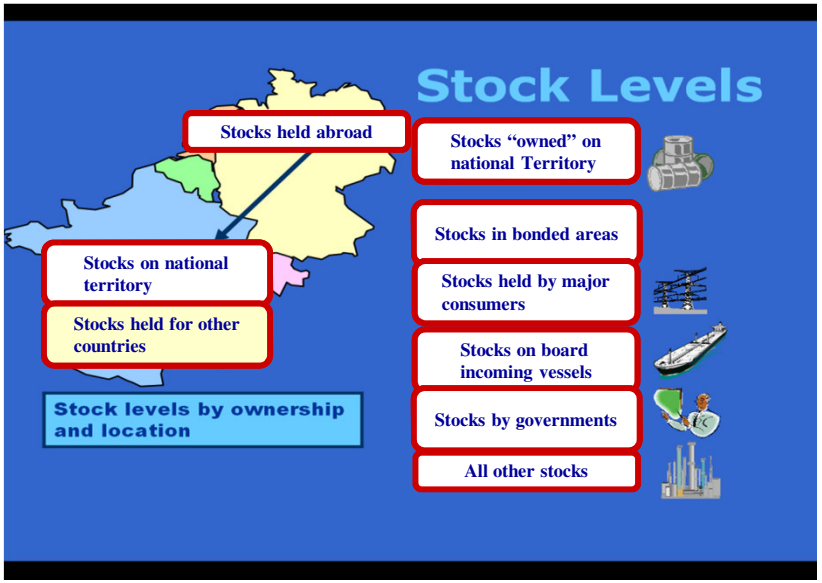
- To maintain and improve systems for coping with oil supply disruptions
- To promote rational energy policies in a global context through co-operative relations with member countries, non-Member countries, industry and international organisations
- To operate a permanent information system on the international oil market
- To improve the world's energy supply and demand structure by developing alternative energy sources and increasing the efficiency of energy use
- To assist in the integration of environmental and energy policies

As a consequence, monthly oil statistics has always been a priority

Monthly Oil Questionnaire



- Crude, NGL and Other Hydrocarbon balance
- Oil Product Balance
  - Production
  - Imports/Exports by Origin and destination
  - Refinery data
  - Deliveries
  - Stock levels



- Data for M-2

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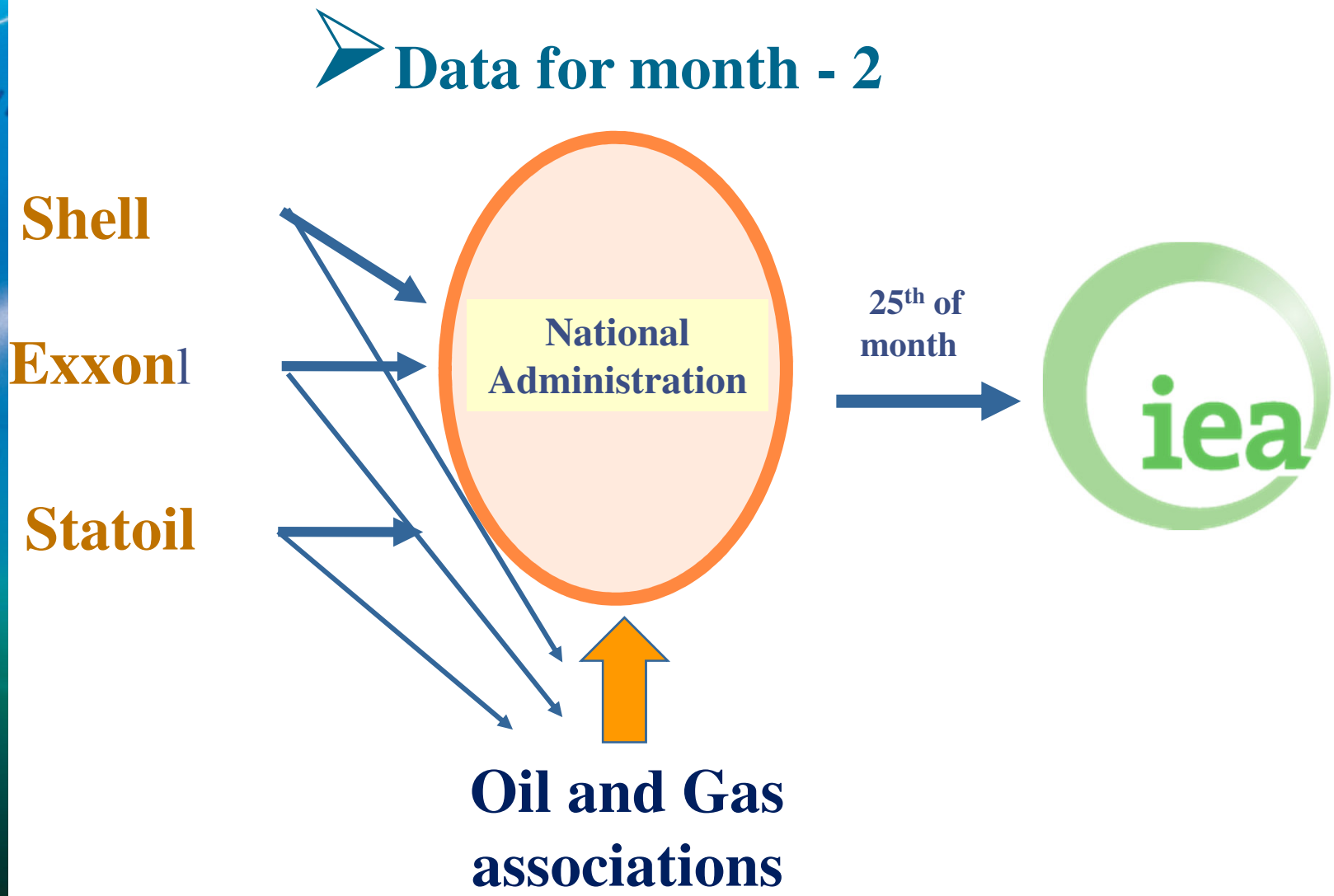
How are monthly data collected?



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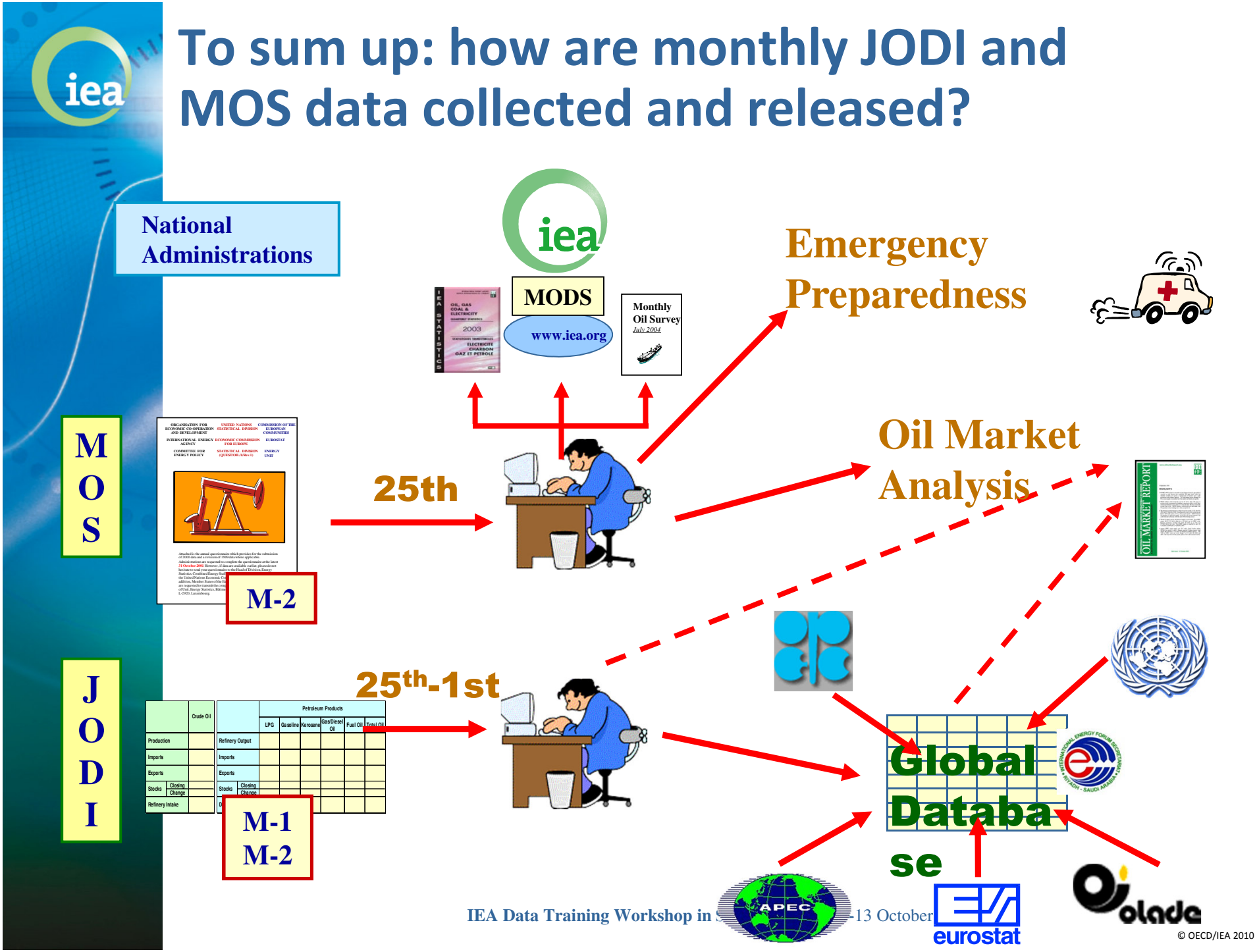
To sum up: how are monthly JODI and MOS data collected and released?



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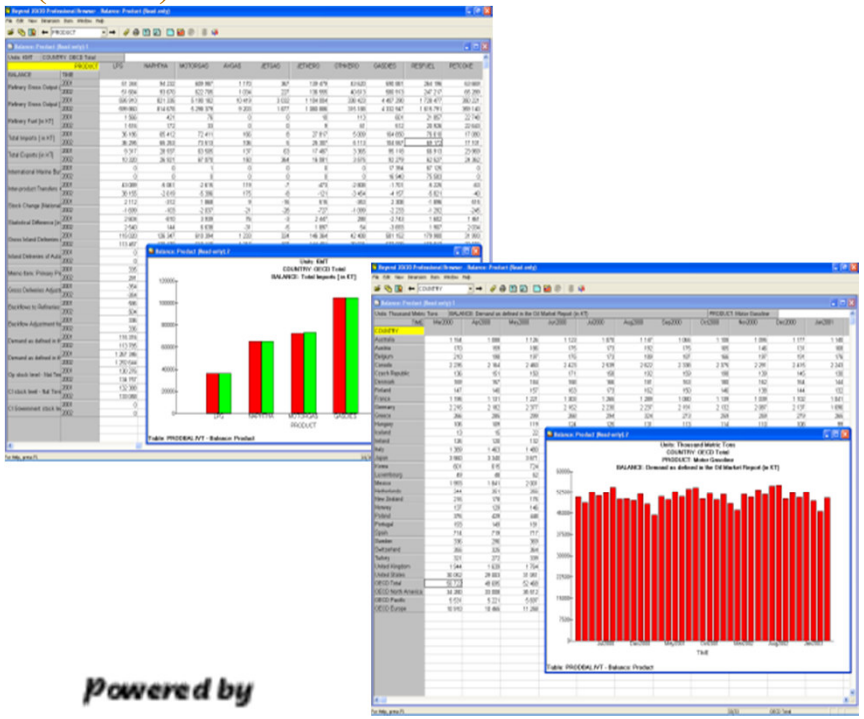
Use of Monthly Oil Data

Oil

Publications

Electronic Data

Monthly Oil Data Service (MODS)



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Thank you for your attention

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