

Proposals for strengthening harmonisation between organisations

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Why is harmonisation essential?

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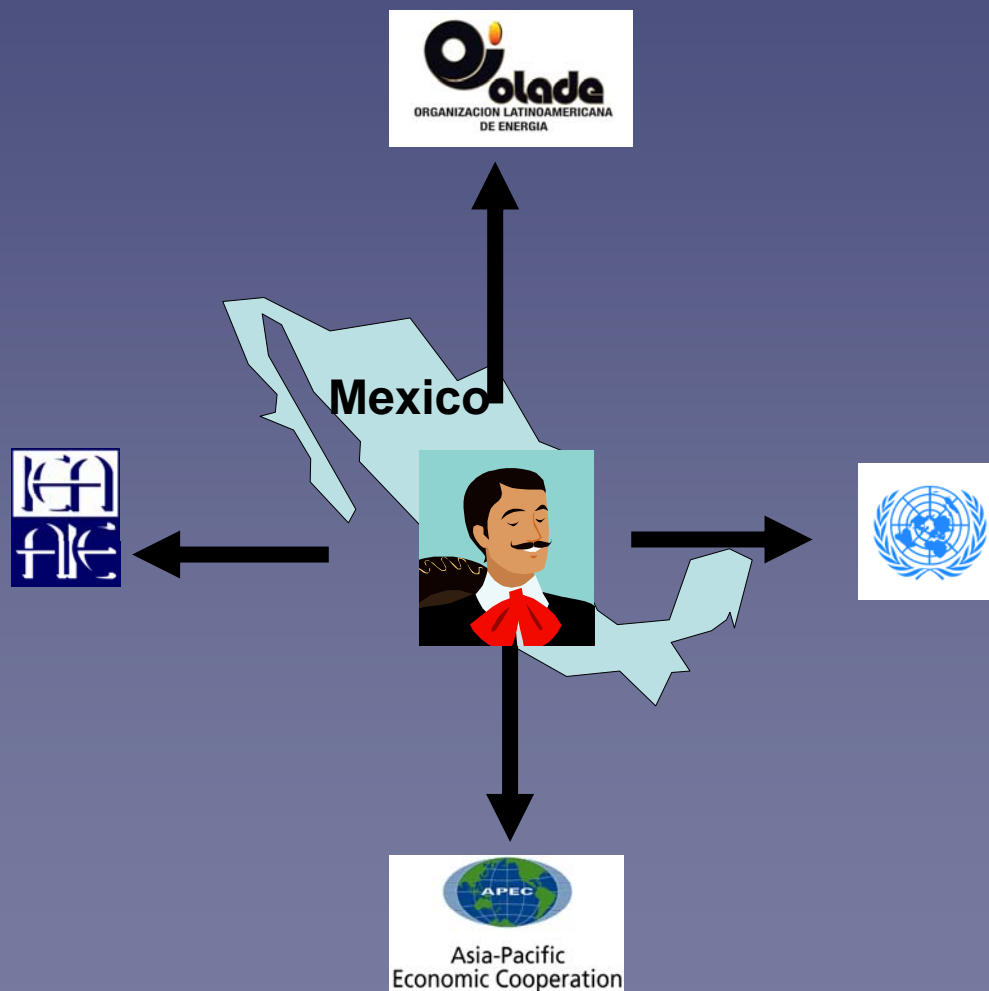
Data vary between sources

Data vary from source to source

Mexico Oil Production		1995	1996	1997	1998
	APEC	2653	2903	3087	3134
	IEA	2741	2872	3062	3109
	OLADE	2722	2969	3022	3109
	OPEC	2618	2858	3022	3109
	UN	2834	2977	3166	3109



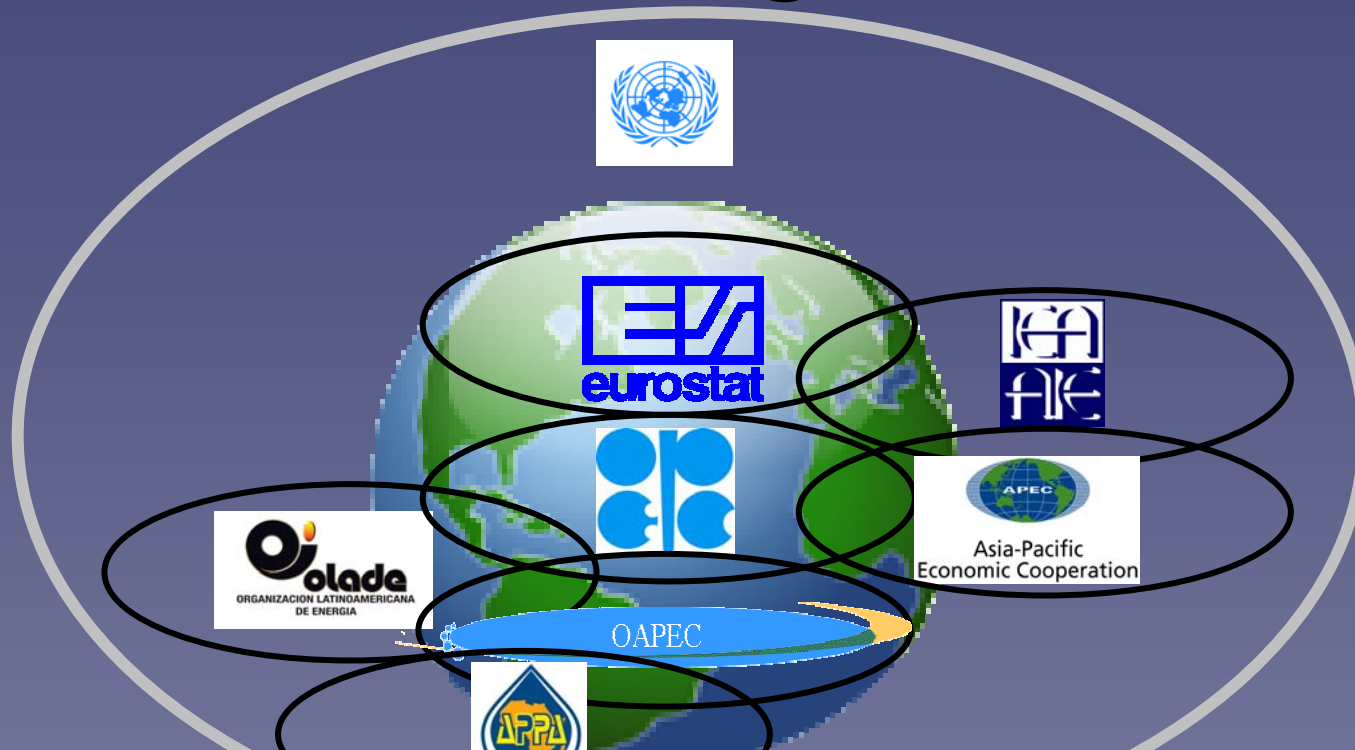
Burden to statisticians



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Burden to Organisations



Overlapping membership means that each organisation collects and processes information for their own members. Some of which are covered by other organisations. Resource efficient?
Problem: Definitions need to be harmonised, standards and methodologies agreed upon.

Harmonisation is essential

Because:

- It can avoid confusion when analysing data
- It can reduce the burden for countries with multiple membership
- It can reduce the international organisations burden (provided harmonisation)

What needs harmonising?

Different areas for harmonisation

- Definitions: products and flows
- Questionnaires
- Methodologies
- Units and conversion factors
- Verification procedures / Quality standards
- Presentation of data

Where and How to start?

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First Step

- Know the differences and similarities
- InterEnerStat Website offers this possibility

Definitions used by different Organisations

The screenshot shows the InterEnerStat website interface. The top navigation bar includes links for Home, Organisations, Definitions, Units, Reference Documents, Databases/Data, Meetings, and Contact Us. The main content area is titled 'Natural Gas' and lists definitions from four organizations:

- Asia-Pacific Economic Cooperation (APEC)**

Natural gas comprises gases, occurring in underground deposits, whether liquefied or gaseous, consisting mainly of methane. It includes both "non-associated" gas originating from fields producing hydrocarbons only in gaseous form, and "associated" gas produced in association with crude oil as well as methane recovered from coal mines (colliery gas). They are defined as follows:

 - Associated Gas: natural gas produced in association with crude oil.
 - Non-Associated Gas: natural gas originating from fields producing hydrocarbons only in gaseous form.
 - Colliery Gas: methane produced at coal mines, piped to the surface and consumed at collieries or transmitted by pipeline to consumers.

Notes: Liquid Natural Gas (LNG) is produced by liquefaction of natural gas and is consumed after re-gasification.

Manufactured gas (produced from municipal or industrial waste, or sewage) is covered under Renewables and Wastes.
- European Commission - Eurostat**

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Natural gas does not include biogases and Gas Works Gas. For information, biogases produced by anaerobic digestion of biomass (e.g. municipal or sewage gas) are covered under Renewables and Wastes, while gas works gas production is defined as coal derived products. Transfers of such production to the natural gas network should be reported as inputs from other sources.
- International Energy Agency (IEA)**

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- Latin American Organisation for Energy (OLADE)**

This is a gaseous mixture of hydrocarbons. It includes both free and associated natural gas and is also found in coal mines or zones of geo-pressure. For the purpose of the Energy Balance, both the free and associated net gas produced are considered part of the same source, being of similar nature and use.

Shows similarities and differences



Second Step

- Basis of differences and similarities can be used to find a compromise

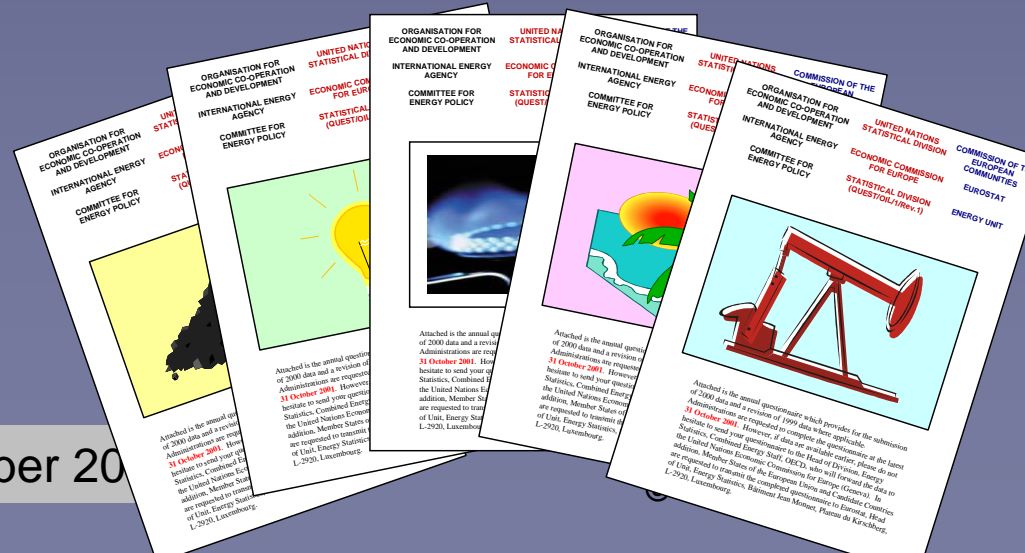


Examples of Harmonisation

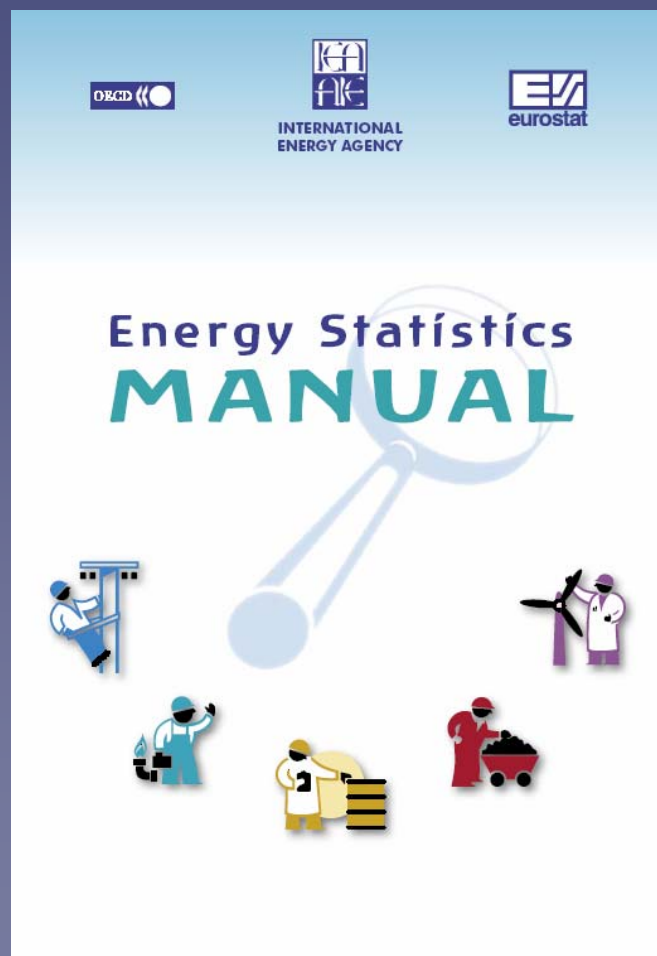
- ✓ Common Questionnaires
- ✓ JODI
- ✓ Harmonisation of definitions
- ✓ Exchange of information

Common Questionnaires

- Annual Fuel Questionnaires were harmonised between Eurostat, IEA and UNECE late 80s.
- More recently, APEC adopted the harmonised questionnaires to a large extent



Common Energy Statistics Manual



Joint manual
between
Eurostat and IEA

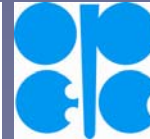
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JODI

- A small harmonised questionnaire on oil (42 data points)
- Used to collect data worldwide
- Common format and definitions for flows and products, shared between:



- No common Unit – but conversion factors



A common manual and database

Address: <http://www.jodidb.org/IEFS/TableView/tableView.aspx?ReportId=71>

Beyond 20/20
WEB DATA SERVER

English

Reports Production top 30 countries Help

Actions

OTHER: Unit - Thousand Barrels per day (kb/d) Product - Crude Oil Balance

TIME	Apr2005	May2005	Jun2005	Jul2005	Aug2005	Sep2005	Oct2005	Nov2005	Dec2005	Jan2006	Feb2006	Mar2006	Apr2006	May2006
Country														
Australia	407	416	468	457	429	428	385	484	402	296	380	358	345	360
Brazil	1,680	1,693	1,703	1,685	1,630	1,668	1,671	1,678	1,689	1,672	1,695	1,700	1,742	1,753
Canada	2,003	2,039	2,001	2,065	2,054	1,920	2,113	2,160	2,213	2,116	2,082	2,056	2,079	1,824
China	3,596	3,621	3,656	3,650	3,668	3,626	3,649	3,621	3,524	3,703	3,672	3,711	3,836	3,712
Colombia	531	530	530	517	528	536	524	529	523	522	533	535	536	541
Ecuador	521	524	540	549	477	540	533	535	556	553	551	528	546	547
Egypt (Arab Rep.)	657	652	653	652	648	624	658	659	639	645	650	617	655	647
India	695	679	693	660	579	638	642	635	635	666	675	683	682	686
Indonesia	973	969	928	936	943	927	937	0	936	927	932	942	925	925
Iran (Islamic Rep.)	4,102	4,089	4,120	4,146	4,173	4,100	4,071	4,105	4,060	4,100	4,105	4,103	4,091	4,010
Iraq													0	0
Kazakhstan	1,087												1,087	1,222
Kuwait	2,656												2,656	2,579
Libya	1,744												1,744	1,760
Malaysia													745	663
Mexico	3,426	3,457	3,438	3,090	3,426	3,378	3,228	3,319	3,397	3,383	3,321	3,359	3,379	3,337
Nigeria	2,464	2,555	2,514	2,509	2,506	2,575	2,548	2,558	2,600	2,580	2,462	2,246	2,315	2,280
Norway	2,908	2,780	2,395	2,732	2,661	2,593	2,431	2,574	2,582	2,638	2,592	2,630	2,374	2,468
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Qatar	745	749	764	710	743	806	798	798	809	812	815	810	814	808
Russian Federation	9,342	9,302	9,416	9,444	9,492	9,563	9,610	9,612	9,681	9,468	9,484	9,563	9,636	9,658
Saudi Arabia	9,255	9,432	9,432	9,501	9,501	9,445	9,500	9,478	9,279	9,561	9,611	9,521	9,223	8,930
Syria (Arab Rep.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Arab Emirates	2,406	2,300	2,100	2,461	2,549	2,547	2,502	2,516	2,634	2,602	2,632	2,651	2,685	2,621
United Kingdom	1,711	1,695	1,596	1,581	1,304	1,470	1,590	1,494	1,573	1,648	1,597	1,550	1,537	1,452
United States of America	5,488	5,494	5,428	5,244	5,273	4,214	4,248	4,736	4,975	5,047	5,048	5,016	5,067	5,100
Venezuela	3,141	3,173	3,149	3,145	3,154	3,130	3,111	3,124	3,153	3,165	3,160	3,111	3,177	3,127

Done

The JODI World Database: an excellent example of harmonisation of data

Harmonisation of Definitions Exchange of Information

- Harmonisation of Definitions
 - E.g. between IPCC and IEA
- Exchange of Information
 - E.g. between IEA, UNSD, APEC, UNFCCC and WEC



Reactions by International Organisations

- ✓ Suggestions for strengthening harmonisation
- ✓ To the preparations for common definitions

How to further strengthen harmonisation?

Main Suggestions by Organisations: 3 Categories

➤ Harmonisation of:

- ✓ Definitions – flows, products (UNSD)
- ✓ Terminology (UNECE)
- ✓ Units (UNSD)
- ✓ Quality control (EEA)
- ✓ Level of detail (EEA)
- ✓ Compilation (UNSD)

How to further strengthen harmonisation? (ctd)

➤ Education and Training material

- ✓ A common statistics manual (APEC)
- ✓ Collaboration in training courses (APEC, OAPEC)
- ✓ Joint policy studies using energy statistics (APEC)

How to further strengthen harmonisation? (ctd)

➤ Dialogue and co-operation

- ✓ Regular InterEnerStat meetings (IPCC)
- ✓ Technical Working groups (OPEC, UNFCCC)
- ✓ Extend quality and quantity of dialogue between organisations (OAPEC)
- ✓ Organisations should take an open and flexible approach (IAEA)
- ✓ More exchange of information
- ✓ Exchange of personnel

Preparations for common definitions

- Majority support for an expert(s): 12 out of 13 (1 No)
- However, divided opinions on number of experts

■ One Expert

- ✓ APEC
- ✓ EEA
- ✓ Eurostat
- ✓ IPCC
- ✓ OAPEC
- ✓ OPEC
- ✓ Oslo City Group
- ✓ UNFCCC

■ No

- ✓ Eurelec: Depends on the expert, but probably will not help



■ Team of Experts

- ✓ IAEA
- ✓ IEFS
- ✓ UNECE
- ✓ UNSD



■ Main reasons cited: difficult

- ✓ to find expert in all domains
- ✓ Independent expert

Some questions raised

- Some questions
 - Difficult to find an “independent” expert
 - Who will finance the expert(s)?
 - Adoption of harmonised definitions need to be discussed within each organisation
 - What are the implication for historical data series if definitions are harmonised?
 - There is an impact on existing mandatory reporting
 - A scoping study to ensure all considerations are taken into account and a complete TOR are established



A few Suggestions

- **IAEA:** cooperate and collaborate with Oslo City group
- **UNECE:** UNECE Group of Experts on the Harmonization of Fossil Energy and Mineral Resources (AHGE) is prepared to respond to international needs for energy statistics
- **UNSD:** Group of experts to make recommendation to Inter-Secretariat Working Group on Energy Statistics and Oslo City Group

Some reasons for harmonisation of definitions

- We support the idea of having consistency between different organisations to allow **fair comparisons** between different countries (EEA)
- The expert should be required to determine the differences in definitions and propose new definitions acceptable to all parties (APEC)
- The expert would be able to standardise and harmonise definitions to make them more **accurate** and suitable for all users (OAPEC)

Thank you !

