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UNION (EUROSTAT)**

**ORGANISATION FOR ECONOMIC COOPERATION
AND DEVELOPMENT (OECD)
STATISTICS DIRECTORATE**

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Topic (iv): Innovation and related issues including census systems

Statistics Explained – a user-friendly and low-cost dissemination system

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I. Introduction

1. In order to reach larger user groups, and inspired by the success of Wikipedia, Eurostat started a project on disseminating statistical information through a wiki-type system. The main objective is to create an easy to use and frequently updated set of articles about European statistics. As a starting point, the content from existing publications as well as from other sources is uploaded into the wiki. The articles are interlinked with Eurostat data bases and publications. Also, links to related information on other parts of the Eurostat website and on other websites are included. The content is being gradually improved and completed by all Eurostat staff.

2. Statistics explained is using Mediawiki, an open source software wiki package written in PHP, originally used by Wikipedia. It is now used by many other projects and wikis. The Mediawiki functionality was complemented by various extensions, e.g. to enforce review of articles before publishing, to use the Eurostat access control system or to organise categories hierarchically. Further improvements are planned, for example to offer a creation of customized PDF books, to create easy link to social media and email, or to provide a more user-friendly editor for contributors.

3. The system is easy to set up and use and could be therefore attractive for statistical offices of both developing and developed countries. The initial investment needed to get the system running is very low compared to commercial content management systems. Thanks to a large Mediawiki community, most of the features needed were available via various extensions. So far, most of the setup costs were related to configuration and testing and very little to actual development of custom-made components.

4. The system was opened to the public in September 2009. It is still considered to be a beta version since the content structure has still to be stabilized and various technical developments are still ongoing. It is expected to become a stable system during 2010.

II. Characteristics of Statistics Explained

A. The problem

5. Eurostat publishes annually 5-15 printed statistical books, 15 pocketbooks, 120 Statistics in Focus and various methodological publications. Large amounts of content have been created and are disseminated in paper and PDF format. Similar content is often created repetitively in different forms for different purposes.

6. Especially for large publications such as the Eurostat yearbook, the production process is quite cumbersome. Drafts are circulated and discussed several times with the statistical units before a final version is reached. As a consequence, data at the moment of publishing is already 6-9 months older than what can be found on the website.

7. In order to improve the situation, the Eurostat management committee asked to examine the possibilities to disseminate the content of publications more effectively. The subsequent discussions led to the creation of a Wiki-type system for the dissemination of statistical articles and related textual content. This new system does not only change the way of dissemination, but also the way of collaboration in the preparation of publications.

B. The approach

8. Since the remarkable success of Wikipedia, which, only a few years after its creation in 2001, became the main global reference for encyclopaedic information, Wiki technology became popular for numerous other applications.

9. The success of Wikipedia lies in the fact that everybody who feels is an expert in a field can contribute to its content. The editing language is simple and easy to learn, and well documented. Producing an attractive layout also does not require high technical skills. The system keeps track of all changes, so that inadequate contributions can be removed and a previous version restored. The author of a contribution can always be traced.

10. A similar concept has now been implemented for Eurostat's publications. Statistical articles are proposed by an expert in a given field, but can then be reviewed easily by his/her colleague or supervisor. They can be revised by different persons under different angles, for example by a statistical expert on content, by a native English speaker on language, by a technical person on layout and presentation, and by a reviser on coherence or political correctness.

11. A further element of this approach is the re-use of information. The ease of use of the collaborative editing environment of Statistics Explained encourages Eurostat staff to focus on maintaining one up to date version of the information - whether a published text, a methodological manual or a definition – which can either be updated directly in Statistics Explained or easily linked from a statistical article. Any content within Statistics Explained has a stable link and can therefore be hyperlinked from elsewhere in the system, reducing the tendency of staff to create multiple variants of the same text. Quality of texts will therefore improve over time.

12. The main part of Statistics Explained consists of statistical articles presenting and explaining statistical data on a specific topic. Statistical articles have a standard structure and show the main statistical results, explain concepts, data sources and data problems as well as the potential use of the data. Numerous links lead to detailed data on the Eurostat data base, but also to external information such as related international organisations, European legislation, academic articles, policy information etc. A typical example of a statistical article is shown in annex 1. A solid basis of statistical articles for all statistical areas has been taken; established from the content of the Eurostat yearbook and the Eurostat regional yearbook.

13. In addition, Statistics Explained has background articles to explain methodologies and statistical concepts in an understandable way. They may cover a variety of topics such as data collection methods,

surveys, statistical concepts or methods, or the relationship between statistical indicators. It also includes glossary items, which are short definitions of statistical concepts, mostly extracted from the Eurostat glossary data base Coded.

C. Organisation and responsibilities

14. Although Statistics Explained is comparable to Wikipedia in technical and content aspects, it is different in governance. Since Statistics Explained is an integral part of the Eurostat website, Eurostat is fully responsible for the content and has to guarantee the correctness and quality. Updating is therefore limited to Eurostat staff. And although all Eurostat staff can make changes in the content, all modifications are verified by the dissemination unit and by the unit responsible for the respective topic.

In detail, the governance applies the following principles:

- Each page is 'owned' by the statistical unit responsible for the topic. In case of cooperation between units on a subject, a responsible unit is identified after consultation.
- Modifications to the content can be done by all Eurostat users after logging in; there is no anonymous modification possible.
- The Dissemination Unit is in charge of the overall coordination, such as the general structure of pages, navigation or other general pages. It also coordinates the coherence and user-friendly presentation of all pages in terms of readability and conformity to the guidelines.
- Statistical units are responsible for the correctness and accuracy of the content.
- New entries or modifications to existing ones are only visible to users after validation by the dissemination unit and the responsible statistical unit (4 eyes principle).
- The Eurostat Dissemination Committee will regularly discuss governance issues and potential improvements.

In short, the system is flexible and simple: everybody can contribute and all changes have to be verified by just two people, a expert on the topic and a dissemination expert.

15. A major discussion point of Statistics Explained was the updating of data. Like for PDF publications, there is no automatic link between Statistics Explained and the data base, and Statistics Explained data does not change when the data in the data base changes. However, there is always a deep hyperlink to the statistical database where the most recent data can always be accessed. But the text and tables/graphs should not become too outdated either. For example, in the current situation of the unexpected economic decline, it might be advisable to update texts about continuous growth during the past years. The need for updating is very dependent on the subject covered. Statistical units should check their pages at least once a year.

D. Technical infrastructure

16. Statistics explained has been implemented on the basis of Mediawiki, an open source software wiki package written in PHP, originally for use by Wikipedia.

17. It should be mentioned that many other wiki applications are available, including both open-source and commercial products. While other organisations could certainly implement systems like Statistics Explained using different wiki software, Mediawiki has the advantage of being a very widely-known open-source application, easily extensible, with a familiar user interface and which has proved capable of supporting very large numbers of users. It is supported by a large and active development community.

18. The Mediawiki functionality was complemented by various extensions. The most important extensions are:

- CategoryTree to represent the hierarchic theme structure of Eurostat
- CorporateContact to collect user feedback
- Cite to be able to create footnotes
- Send2Friend to be able to send a page to an email address
- FlaggedRev to prevent recent changes to be visible to users before formal approval
- WikiArticleFeeds to convert wiki articles into RSS and Atom feeds

Further extensions are under investigation, as for example:

- FCKEditor to allow for WYSIWYG editing
- PdfBook to allow categories to be compiled into downloadable PDF files
- WhoIsWatching to make sure that all pages are watched by a responsible person
- Collection to allow users to organise personal selections of pages into a collection.
- EditUser to allow editing of the user preferences
- Lucene as a more powerful search engine

19. For any website, traffic monitoring is critical both for further development and for motivating the people involved. Usage of all sections of the Eurostat website – including Statistics Explained - is continuously monitored using SAS Webhound. This provides reports on website visitors, including information about the search engines and keywords used, the languages, the most popular pages, and the length of visits. In addition, Statistics Explained uses the Piwik software to track the usage of Statistics Explained on a day to day basis. Piwik is an open source (GPL licensed) web analytics software program, which provides detailed real time reports.

20. Including the work still to be done on the above extensions, total informatics cost comprises about 1.5 man-years. This includes experimenting, installation, testing, trouble-shooting and a few other specific developments.

E. Statistics Explained and the Eurostat website

21. Statistics Explained is an integral part of the Eurostat website. Technically however, it is a separate system, and decisions had to be taken on how to integrate Statistics Explained with the Oracle Portal, which is the underlying software of the Eurostat website. The integration is mainly done through intensive hyperlinking:

- The main page of the Eurostat website and the specific pages for the statistical topics link to the appropriate pages of Statistics Explained,
- The news part of the Eurostat main page will contain titles of new Statistics Explained articles which link to the those articles in Statistics Explained,
- Statistics Explained will contain in each statistical article numerous direct links to Eurostat data, meta data and publications.

22. For technical reasons, the search function will not be integrated in the short term, so that users will not get, at the same time, articles from Statistics Explained and data sets from the data base in a single search. The search in the Eurostat portal will however show the number of hits in Statistics Explained, with a hyperlink to the search page on which the details can be consulted.

F. Statistics Explained and Publications

23. The introduction of Statistics Explained will have a major impact on the future of publications. In a first phase, Statistics Explained will be primarily a tool for presenting existing publication content with some added value, such as easy access, search and hyperlinking. Several publications will be discontinued once their content is available in Statistics Explained, others, which need to be distributed in paper form, will remain (such as the Eurostat yearbook).

24. But Statistics Explained will also become a type of production system for certain remaining publications in that a selection of Statistics Explained entries will be recombined into a traditional publication. This approach will be first tested with the Eurostat yearbook, which, in its future version, will be assembled from a set of freshly updated articles from Statistics Explained. In order to support this approach, all articles suitable for the yearbook will be earmarked and their updates closely monitored, in order to maintain their suitability.

III. First experiences

25. Statistics Explained was opened to the public on 28 September 2009 as a beta version. Currently, the system contains 137 statistical articles and 24 background articles, plus about 500 definitions.

26. Usage has been constantly growing over the months. As of March 2010, more than one million page views have been registered, and the monthly increase is about 20%. Although by far the most visits come from Google, there is an increasing number of links from websites all over the world, including professional sites (Guardian, ResourceShelf,...), national statistical offices, Wikipedia, but also an increasing number of blogs and forums which refer to specific Statistics Explained pages.

27. Among the most popular topics are GDP per capita or inhabitant, holiday trips of EU residents, immigration, earnings in industry and services, gas and electricity prices, GDP spent on research and development, electricity production, air pollution and CO2 emissions. This selection indicates clearly that Statistics Explained reaches a large public with statistical data of general interest.

28. Statistics Explained has been awarded 'Resource of the week' by ResourceShelf (<http://www.resourceshelf.com/2010/02/15/resource-of-the-week-eurostat-statistics-explained/>) and 'Business Website of the Week' by the James J. Hill Reference Library (<http://blog.hillsearch.org/index.cfm/2010/3/16/Business-Website-of-the-Week--Statistics-Explained-your-guide-to-European-Statistics>)

29. Participation of Eurostat staff in the content development varies. Whereas some units show a high motivation to extend or update the content, others see it as an additional burden to an already overloaded staff. It will be the task of the Statistics Explained project team to demonstrate that Statistics Explained in the end simplifies and rationalises dissemination. Currently, about 135 people (out of a total Eurostat staff of 835) have logged into the system, of which an estimated 50 make regular updates.

Annex 1: Examples

1. Main page (http://epp.eurostat.ec.europa.eu/statistics_explained/index.php)

European Commission
eurostat

Statistics Explained

Log in

search

Go Search

navigation

- Home
- Statistical themes
- Categories
- Help

links

- Europa
- Eurostat
- Eurostat data
- EU Bookshop
- Contact Eurostat

toolbox

- What links here
- Related changes
- Special pages
- Printable version
- Permanent link
- RSS Atom
- Get page as PDF
- Send to a friend

Main Page

Welcome to Statistics Explained

Statistics Explained, your guide to European statistics.

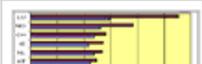
Statistics Explained is an official Eurostat website presenting all possible statistical topics in an easily understandable way. Together, the articles make up everyone's **encyclopedia** of European statistics, completed by a **statistical glossary** clarifying all terms used and by numerous links to further information and the very latest data and metadata, a **portal** for occasional and regular users alike.

Statistics Explained currently features **703** articles. To find the information you need, use the hierarchical **theme tree**, the **categories** or the search function (alt-f).

Statistics Explained is a beta version at present; please send your comments to: estat-statistics-explained@ec.europa.eu

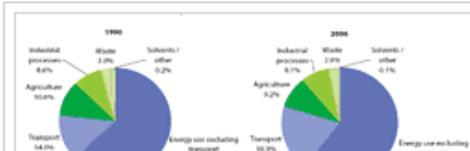
New

Updated: GDP per capita, consumption per capita and comparative price levels

 This article focuses primarily on gross domestic product (GDP) per capita in the 27 European Union (EU) Member States but also looks at the level of

Featured article

Climate change statistics



This article shows the evolution of greenhouse gas (GHG) emissions in recent years in

2. Statistical article (http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Trends_in_consumer_prices)

search

Go Search

navigation

- Home
- Statistical themes
- Categories
- Help

links

- Europa
- Eurostat
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toolbox

- What links here
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- Permanent link
- Get page as PDF
- Send to a friend

Trends in consumer prices

Data from August 2009, most recent data: [Further Eurostat information](#), [Main tables and Database](#).

Consumer price indices (CPIs) measure the changes over time in the prices of consumer goods and services acquired, used or paid for by households. CPIs have a variety of potential uses, for example in indexing commercial contracts, wages, social protection benefits or financial instruments and as inputs into various types of economic analysis.

They are also a key indicator when determining price convergence and stability in **monetary policy**. Since 1999, when the euro area was created, the main focus of interest of the European Central Bank (ECB) has been assessing price stability in the euro area. The ECB defines price stability as an annual increase in the harmonized index of consumer prices (HICP) for the euro area of below, but close to, 2 %.

This article highlights the trends in these important measures of inflation over the last few years in both the euro area and the European Union (EU) as a whole, looking in particular at the sharp increase in 2008.

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- 2 Data sources and availability
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 - 3.4 Dedicated section
 - 3.5 Other information
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Main statistical findings

Trends in consumer price inflation

In 2008, the highest ever annual average inflation rate, of 3.3 %, was recorded for the euro area. This high rate followed several years of relative stability with inflation at around 2.2 %. The sharp rise in 2008 can be explained by steep increases in energy and food prices between autumn 2007 and autumn 2008 (see Graph 1). Looking at the monthly figures, annual inflation was actually above 3 % from November 2007 until October 2008 and reached its peak in June and July at 4.0 %. In the second half of 2008 and early 2009, a substantial decline in these rates was recorded, dropping to as low as 0.6 % in March 2009.

Consumer prices for food in particular recorded extraordinary inflation rates in 2008 with an annual average of 5.7 %. This was significantly above the price increases recorded for food products since 2001, when annual average inflation reached 5.3 % at the time of the outbreaks in farms of BSE, otherwise known as 'mad cow disease', and foot-and-mouth. Food price increases in 2008 might be explained by the sharp price rises in milk, cheese and eggs, as well as in oil and fats. Towards the end of 2008, food price inflation decreased and stood at 1.6 % in March 2009. For both sub-categories 'milk, cheese and eggs' and 'oil and fats', annual inflation rates actually turned negative at the beginning of 2009.

Year	European Union	Euro area	USA (CPI)	Japan (CPI)
2001	2.2	2.2	-0.8	0.0
2002	2.2	2.2	-0.8	0.0
2003	2.2	2.2	-0.8	0.0
2004	2.2	2.2	-0.8	0.0
2005	2.2	2.2	-0.8	0.0
2006	2.2	2.2	-0.8	0.0
2007	2.2	2.2	-0.8	0.0
2008	3.3	3.3	-0.8	0.0

Source: Eurostat (en16050)

EU inflation is measured by the EICP (European Index of Consumer Prices), which is the official EU aggregate. The EU included 15 Member States until April 2004, 25 Member States from May 2004 and December 2006 and 27 Member States from January 2007.

Euro area inflation is measured by the MUICP (Monetary Union Index of Consumer Prices), which is the official euro area aggregate. The euro area initially included Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece was included from January 2001, Slovakia from January 2007, Cyprus and Malta from January 2008 and Slovenia from January 2009.

For the USA and Japan, national consumer price indices are used, which follow a slightly different methodology.

Graph 1: HICP all-items, annual average inflation rate - (% change compared with previous year)

Main heading	2007	2008
HICP all-items	2.2	3.3
Communications	2.2	3.3
Recreation & culture	2.2	3.3
Clothing & footwear	2.2	3.3
Health	2.2	3.3
Household equipment	2.2	3.3
Miscellaneous	2.2	3.3
Alcohol & tobacco	2.2	3.3
Restaurants & hotels	2.2	3.3
Education	2.2	3.3
Transport	2.2	3.3
Housing	2.2	3.3
Food & non-alcoholic beverages	5.3	5.7

Source: Eurostat (en_hicp_atnd)