

# **Methodology of the Monthly Index of Services**

## **Activities of Membership Organisations Not Elsewhere Classified Industry Review**

### **Introduction**

At the launch of the experimental Index of Services (IoS) in December 2000, a commitment was made to review and improve where practical, the sources and methods used to measure the service sector. This paper outlines the findings of the Activities of Membership Organisations Not Elsewhere Classified and Other Service Activities Industry Review.

### **Summary**

The industry review for Activities of Membership Organisations not elsewhere classified and Other Service Activities (known hereafter as Membership Organisations not elsewhere classified) has recommended the introduction of trade union membership data as an output indicator for trade union activities.

Although the methodology will be changed all the way back to 1994 in the IoS and GDP(O) systems, the period from 1995 will be revised at Blue Book 2006.

### **How important are the Membership Organisations not elsewhere classified?**

In terms of gross value added (GVA) weights in 2004, Membership Organisations nec (SIC<sup>1</sup> Division 91) represents:

- 0.8% of the IoS
- 0.6% of Total GVA

Membership Organisations not elsewhere classified are published as part of the Government and Other Services<sup>2</sup> component within the IoS.

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<sup>1</sup> The SIC is the Standard Industrial Classification, and this is the classification system used in the UK to define industrial groupings. The 4-digit refers to the level of detail and is generally the level at which data is collected and aggregated from within GDP(O) and IoS. More detail on this can be found in the IoS Methodology documentation

<sup>2</sup> This covers the following sections of the UK SIC: L Public Administration and Defence; Compulsory Social Security, M Education, N Health and Social Work, O Other Community, Social and Personal Service Activities, P Private Households Employing Domestic Staff and Undifferentiated Production Activities of Households for Own Use

## Methodology

### Previous methodology<sup>3</sup>

Within Division 91 there were six 4-digit SICs<sup>4</sup>, which were grouped into one composite SIC group. The table below gives the detail of the methodology that was previously used:

**Table 1**

SIC	Industry Description	Output Indicator	Source	Current Deflators	GVA weight per 1000
91.11	Activities of business and employers' organisations	Employment data adjusted for changes in productivity.	MIDSS	Productivity adjustment constrained to <1%.	6.0
91.12	Activities of professional organisations				
91.20	Activities of trade unions				
91.31	Activities of religious organisations				
91.32	Activities of political organisations				
91.33	Activities of other membership organisations not elsewhere classified				
Key to table: MIDSS - ONS Monthly Inquiry into Distribution and Services Sector					

Deflated turnover were used as the proxy to measure GVA. The proxy was supplied by the MIDSS survey. A productivity adjustment constrained to less than 1% growth was used for deflation.

All industries within the division were measured using the same output indicator and were not allocated individual portions of the GVA weight.

This paper focuses solely on SIC 91.2, Activities of Trade Unions.

### Reasons for review

It is widely accepted that union membership in the UK is declining,

In 2005 the Fabian Society reported that union membership levels had nearly halved in the previous 25 years, falling from 12 million in 1979 to 6.4 million at the time of the report.<sup>5</sup>

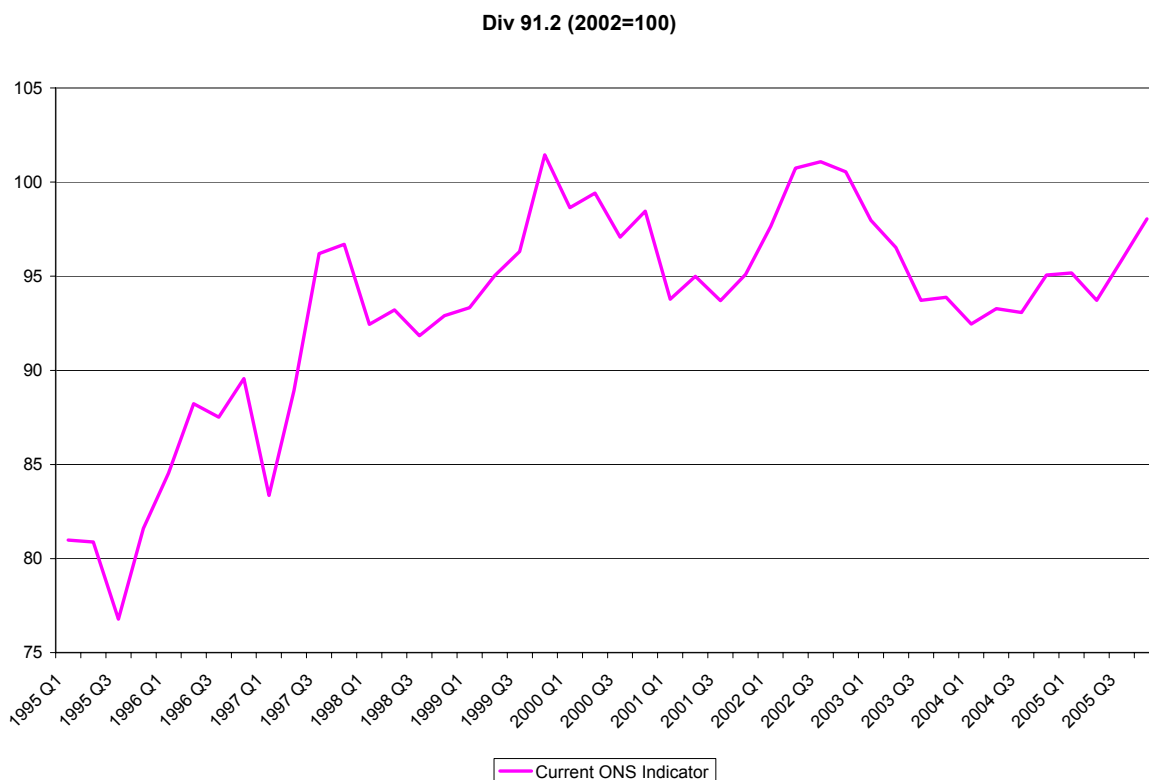
One would have expected to see some correlation between the current ONS indicator and the findings of the Fabian Society, however referring to figure 1 below we see that this was not the case. This led us to believe that the employment indicator used was not the best indicator for trade union activities.

<sup>3</sup> In this report, the previous methodology refers to the methodology used prior to Blue Book 2005, and the new methodology to the methodology taken on at Blue Book 2005

<sup>4</sup> See SIC 2003 documentation for details of the full breakdown of division 92 in the UK SIC - <http://www.statistics.gov.uk/sic2003>

<sup>5</sup> BBC News Online 7th December 2005 <http://news.bbc.co.uk/1/hi/business/4507640.stm>

**Figure 1 - Current IoS indicator for Trade Union output based on employment data expressed as an index (2002 = 100)**



### What should we be doing?

In October 2001, Eurostat (European Union's Statistical Office) published the '[Handbook on Price and Volume Measures in National Accounts](#)'. The handbook provides guidance by product, on what price and volume methods should ideally be used (A methods), are acceptable methods (B methods) and those methods that should not be used (C methods). The handbook has been written in the context of annual data but the same rules apply to sub-annual data.

### What do Eurostat recommend for Division 91?

This division should consist almost entirely of non-market services provided by non profit institutions such as professional bodies, trade unions and religious organisations. The common feature is the payment of a membership fee covers a range of services, which may or may not be used by the individual member in a particular time period.

The only suitable A method is to obtain detailed information on the provision of services actually provided to members, broken down into fine detail and weighted by the cost of provision. This would impose a substantial burden on the organisations.

A potential B method is to use the number of members as a proxy for output but the different types of membership must be captured if they give significantly different entitlements to receive services and it must be clear that the average use of service by members does not change significantly year on year.

## Issues faced by the industry review

A search for alternative methods of measuring the output of trade unions revealed that trade union membership details were available from the Department of Trade and Industry<sup>6</sup> calculated from ONS Labour Force Survey data. The data were assessed in terms of coverage and availability,

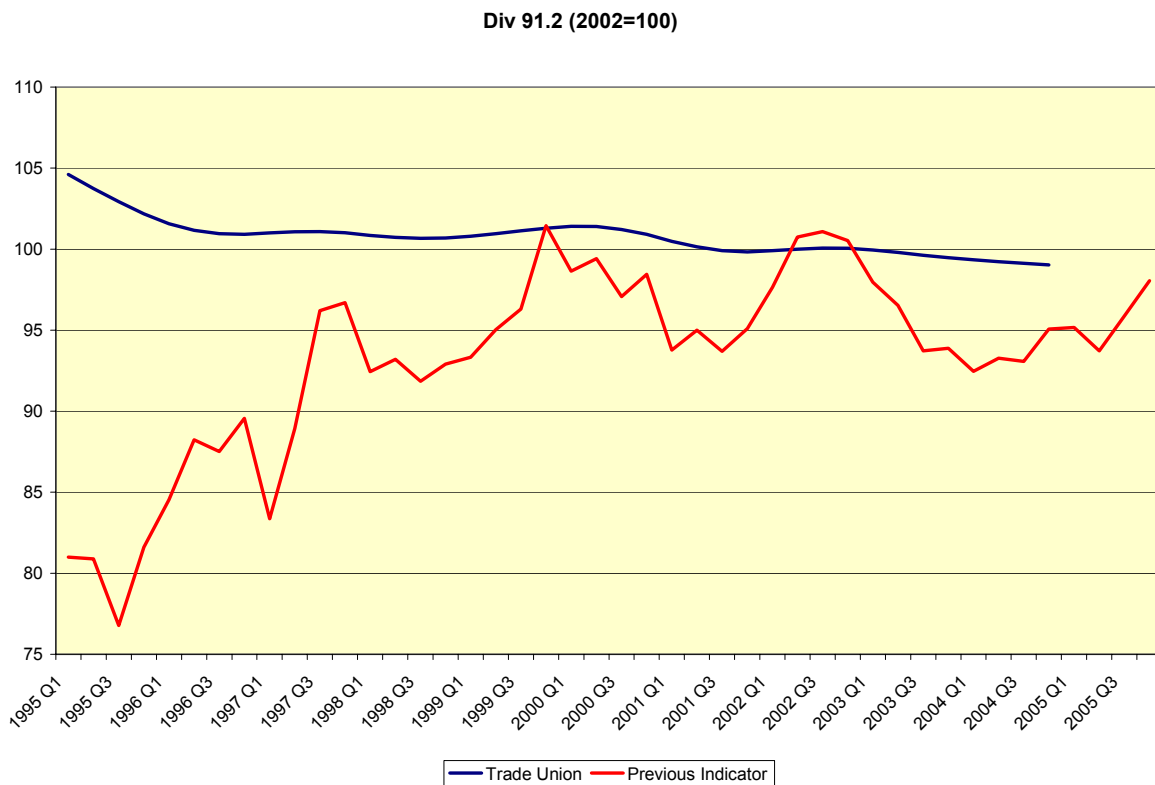
### Coverage

- Covers all trade union members in the UK
- Consists of members as at Autumn of each year
- Single membership level

### Availability

- Annual data published during the spring of the following year<sup>7</sup>
- Data available from 1995 onwards<sup>8</sup>

**Figure 2 - Comparison of current IoS indicator and the proposed trade union data expressed as an index (2002 = 100)**



<sup>6</sup> The DTI is responsible for publishing the trade union National Statistic. <http://www.dti.gov.uk/er/emar/trade.htm>

<sup>7</sup> For example, 2005 monthly data available spring 2006.

<sup>8</sup> Since the data is only available from 1995 a back cast to cover 1994 data was required.

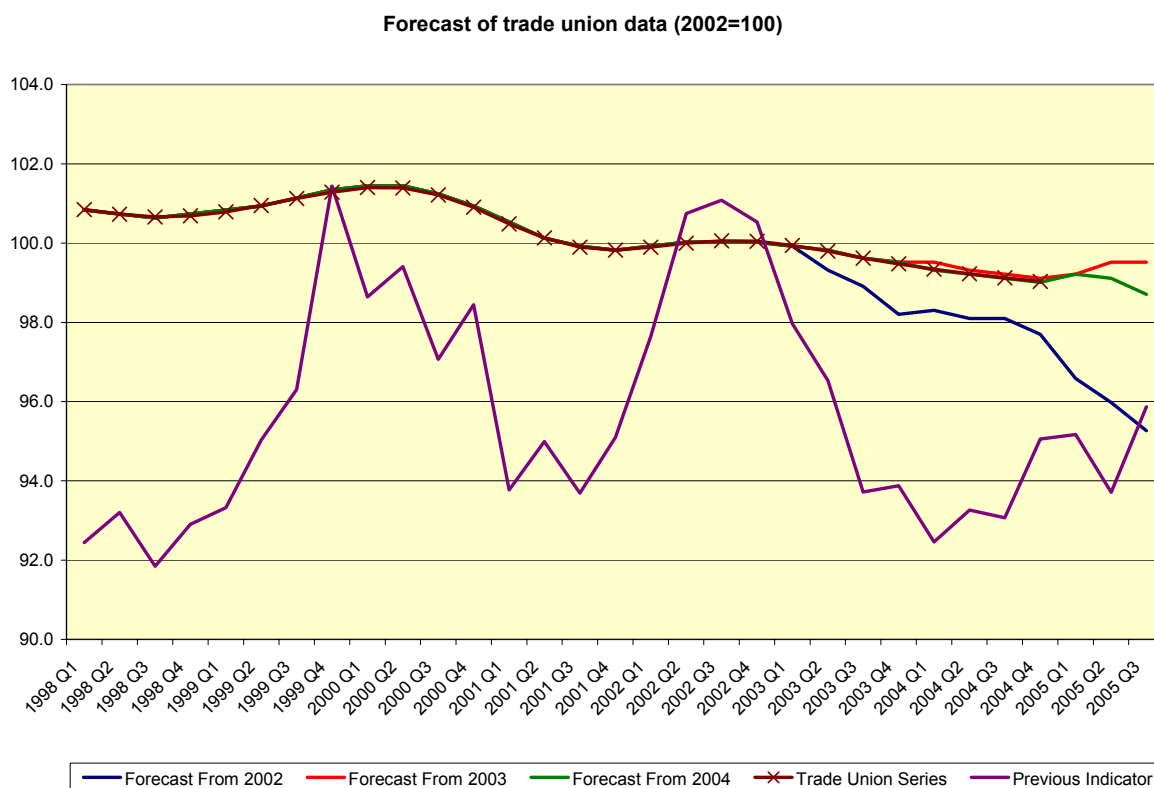
The previous method clearly illustrated an erratic pattern which was at odds with the smooth line generated from the trade union data. As these data were derived from annual figures then one would have expected a certain degree of stability, but it was clearly consistent with a steady long-term decline in annual membership figures which the LFS had been producing for the past 10 years. Conversely, the previous indicator showed an increase where the trade union data decreases, and showed many peaks and troughs which contradicted the DTI's own figures.

Most importantly, however, since most trade union memberships were annual subscriptions one would not have expected to see the extreme, relatively short term fluctuations illustrated by the current indicator, regardless of their trend. Any increase or decline was likely to be much smoother.

One potential issue was that if extra benefits were added to memberships at no extra cost on an annual or similar basis, then data were no longer consistent as the product has changed.

The most recent DTI data available at the time of this review were the 2004 data. In order to produce more recent figures, the data had to be forecast in an effort to assess the projected course that the DTI data would take:

**Figure 3 - The forecasting of trade union data**



Although three different results were gathered from three different years, 2002's forecasting was clearly very erratic and out of line with the rest of the compiled data, while 2003 and 2004 were much more accurate. While 2003 data suggested a slight resurgence in membership levels, 2004 showed a continuation of the long term overall decline. Because this was not a major fluctuation, it again showed that a steady growth or decline was much more in line with the behaviour of trade unions' membership levels, rather than the major peaks and troughs produced by using the current ONS indicator.

On analysis, adopting trade union data for measuring 91.20 would be a Eurostat B method and in weighting this with the MIDSS data retained as a proxy for the rest of the division the indicator for division 91 would be improved.

## Who was consulted as part of the Industry Review process?

Within the ONS, there was comprehensive consultation with relevant teams both within National Accounts and in the survey areas. In terms of external consultations we are grateful to the assistance received from the Department of Trade and Industry.

## New methodology

In summary the industry review for division 91 has made the following recommendation that was implemented at Blue Book 2006:

- to create and improved indicator for Division 91 by weighting together two indicators such that Division 91 excluding 91.2 is measured by the current employment indicator and 91.2 is measured by trade union membership.

**Table 2**

SIC	Industry Description	Output Indicator	Source	Current Deflators	GVA weight per 1000
91	Activities of membership organisations nec	Employment data adjusted for changes in productivity.	MIDSS	Productivity adjustment constrained to <1%.	5.0
91.11	Activities of business and employers' organisations				
91.12	Activities of professional organisations				
91.31	Activities of religious organisations				
91.32	Activities of political organisations				
91.33	Activities of other membership organisations not elsewhere classified				
91.20	Activities of trade unions	Trade union membership data	DTI	Not applicable.	1.0

Key to table: MIDSS - ONS Monthly Indicator into Distribution and Services Sector, DTI – Department of Trade & Industry.

In addition it was accepted that the current productivity series used as a deflator in this division should be replaced by an ONS produced productivity per job series.

## Benefits and issues of new methodology

The main benefits and assumptions of the proposals have been summarised in the table below:

**Table 3**

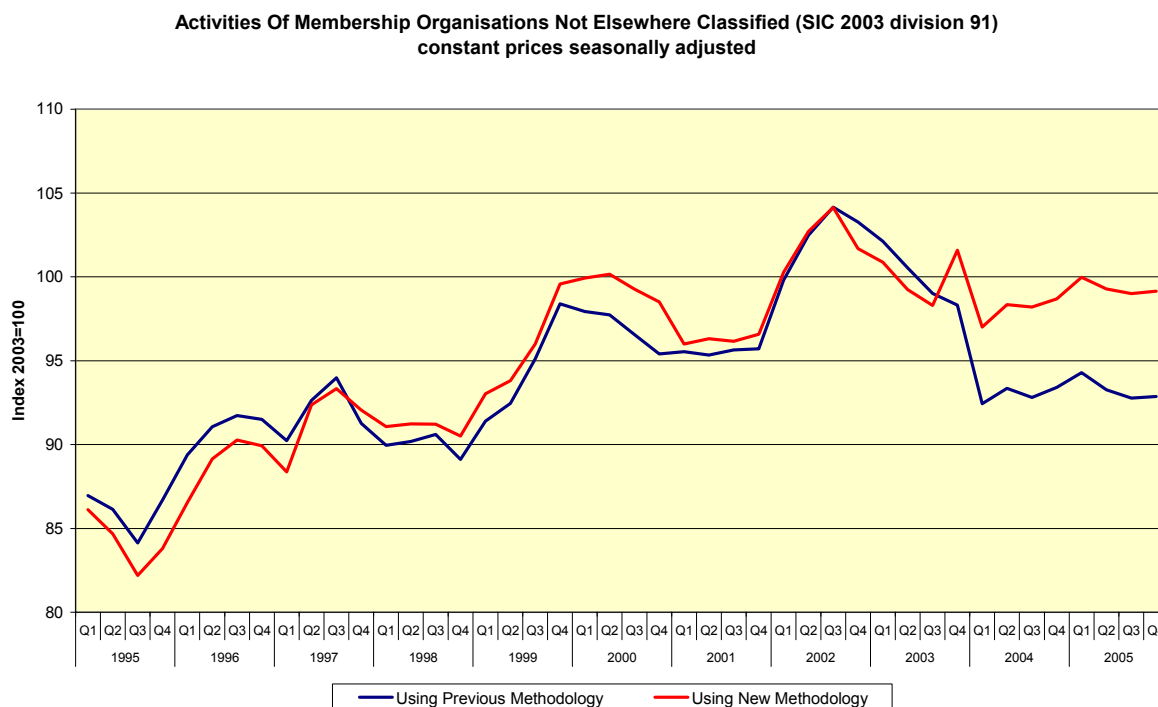
Benefits		Assumptions
Direct measurement of trade unions.	v	Since the current union data cannot be split out from the current measure there is a risk of double counting by introducing this proposed data source. We must assume it moves in line with the rest of the industry based on the current proxy.
Trade union measurement becomes a B method.		

## Impact of new methodology

The graph below shows the impact of the new methodology on Division 91. The data have been revised back to January 1995. This in line with the open period for revisions set-out in the National Accounts Revisions Policy for Blue Book 2006.

**Figure 4**

Impact of changes at divisional level (including forecast) expressed as an index (2003 = 100)



## Contact Information

Any questions or comments on this article are welcome, as are offers to participate in the process of improving industry sources and methods. Any enquiries should be addressed to:

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## **Annex 1 – Background to Trade Union data**

The Department of Trade and Industry is responsible for publishing the trade union National Statistic. In the past, estimates of trade union membership from the Labour Force Survey (LFS) were published in an annual article in the ONS journal *Labour Market Trends*. However, the amount of information that can be conveyed in a single article is necessarily quite limited, so in its place we are now publishing an annual statistical report.

The April 2005 report, [Trade union membership 2004](#), is the second of this new annual series. The report is based on LFS data-sets weighted to post Census-2001 population estimates.

It contains estimates of trade union membership from the Labour Force Survey for autumn 2004 for both employees and for all respondents who are in employment. Estimates are presented for the number and proportion of people in employment who are trade union members in both the United Kingdom and Great Britain, and for employees whose pay and conditions are affected by collective agreements. We also provide trade union densities by age, sex, ethnicity, income, full and part-time employment, sector, nation and region.

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