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To:

Richard Benyon MP
Parliamentary Under-Secretary
for Natural Environment and Fisheries

The annual report on drinking water quality in England and Wales will be published on 1 July 2010. It provides a comprehensive independent commentary on the quality and safety of drinking water during 2009 and comes in seven parts, covering the six regions of England and Wales. I will be discussing the content of the report with the Consumer Council for Water at a series of regional meetings in July.

The role of drinking water inspectors, appointed under the Water Industry Act 1991, is to independently scrutinise the quality of drinking water. Drinking water must be wholesome and fit for human consumption at all times. Inspectors take action to require improvements to water supplies when there is sound evidence of a risk of a particular water supply failing to meet the drinking water standards. The annual drinking water report publically records the work of inspectors together with measures indicating how well the water industry is meeting the desired outcomes of drinking water policy[1] which are:

- Water suppliers deliver water that is safe and clean
- The public have confidence in their drinking water

Drinking water quality

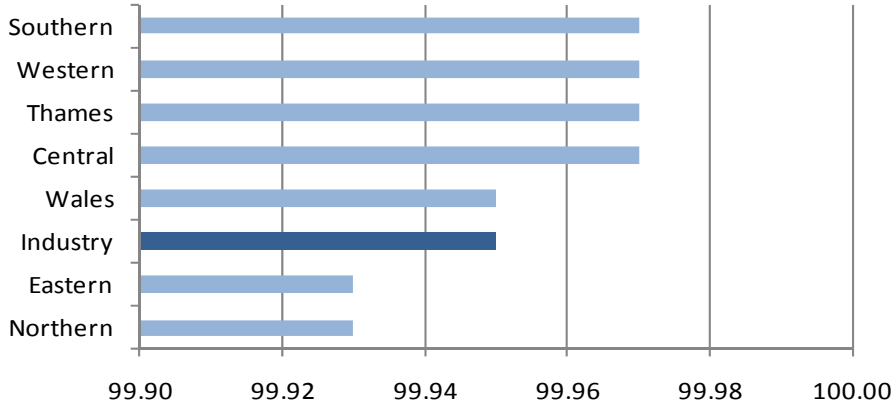
The results of testing at consumers' taps in 2009 demonstrated the overall good quality of drinking water. The combined water industry figure for compliance with drinking water standards was 99.95%, only marginally down on the figure of 99.96% reported in each of the previous three years. This figure is made up of the results of over 2 million tests for 39 different parameters on samples collected by the companies from consumers' taps in each of the 1,693 water supply zones in England and Wales. The comparable figure for England was

[1] Securing Safe Drinking Water for All: Drinking Water Inspectorate Strategic Objectives 2010-2015: ISBN 978-905852-50-5

also 99.95%. In 1,314 out of the total of 1,670 zones in England, all the tests passed every standard. In zones where failures were recorded, the remedial action taken or planned is described in the report.

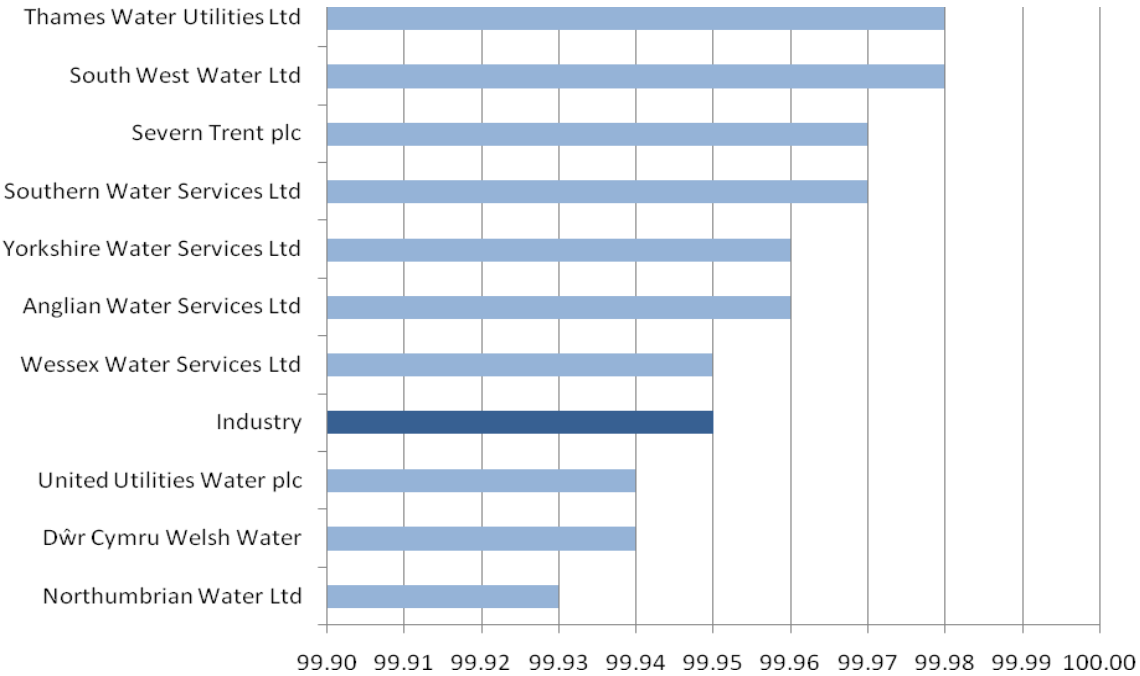
Looking more closely at the quality of tap water in England, compared to a few years back, there is now less variation between the different regions with four recording a figure of 99.97%, above the industry average (Figure 1). The Northern region figure remained at 99.93%, the same as recorded for the Eastern region, which has fallen from a high of 99.97% reported last year.

Figure 1: Regional compliance with standards



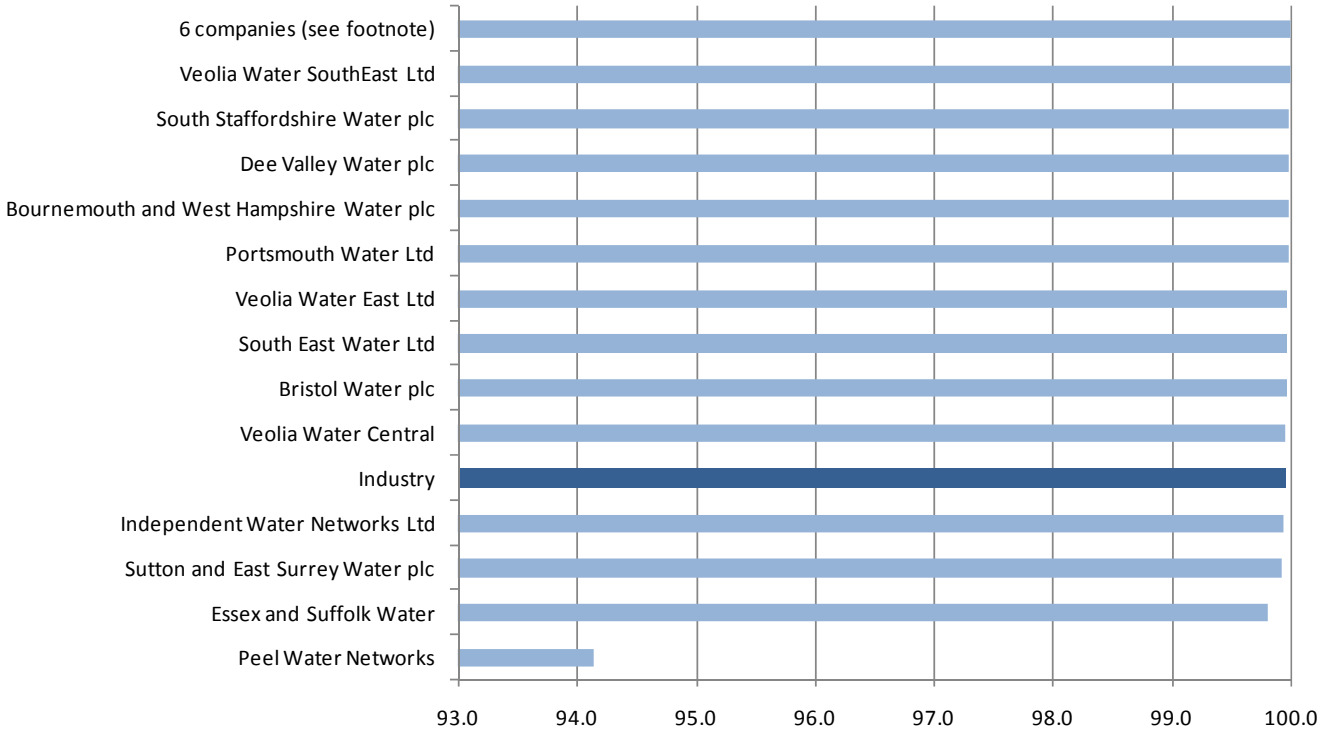
At water company level, figures for the 'combined water and sewage companies' ranged from 99.93% to 99.98% (Figure 2). Although still below the industry average, United Utilities recorded the largest relative improvement in results in 2009.

Figure 2: Water and Sewage companies – compliance with standards



Among the 'water only' companies and licensees the figures ranged from 94.14% to 100% (Figure 3). Figures for four companies (Bournemouth and West Hampshire Water, Dee Valley Water, South East Water and Portsmouth Water) improved to above the industry average in 2009. Only two companies (Essex and Suffolk Water and Independent Water Networks) recorded lower figures compared to the previous year.

Figure 3: Water only companies – compliance with standards



Footnote: 6 companies achieved 100% compliance: Albion Water, Cambridge Water plc, Cholderton and District Water Company Ltd, Hartlepool Water plc, SS E Water plc. Veolia Water Projects Ltd

Water supply quality management

Continuous provision of safe clean drinking water depends on sound operation and maintenance practices being applied by companies at every stage of water supply from source to tap. The Inspectorate has four indices of water quality which provide insights into how well the industry is managing the quality of drinking water supplies. Each index looks in turn at different core components; water treatment, service reservoir integrity and distribution maintenance.

In 2009, there was little change in the indices at industry level however this masks changes at regional or company level. For example, problems in 2009 with water treatment process control at

several works saw the Northern region figure fall to 99.89%, down from a high of 99.96% in 2007. The index for disinfection was also lower this year in three of the regions with the lowest figures being recorded by the Central, Western and Northern regions. The integrity of service reservoirs has improved with five out of six of the English regions exhibiting figures better than those recorded four years ago when the indexes were first introduced. Also, for the first time in four years, the overall industry distribution maintenance figure has improved, with five out of six English regions being well above industry average.

Figure 4 : Process Control at treatment works

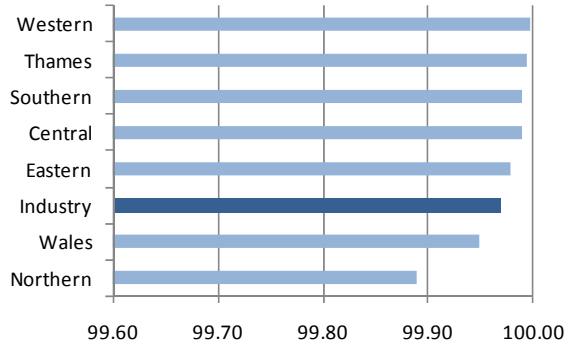


Figure 5: Disinfection at treatment works

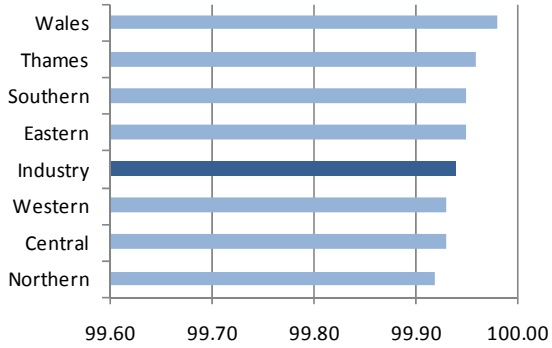


Figure 6 : Integrity of service reservoirs

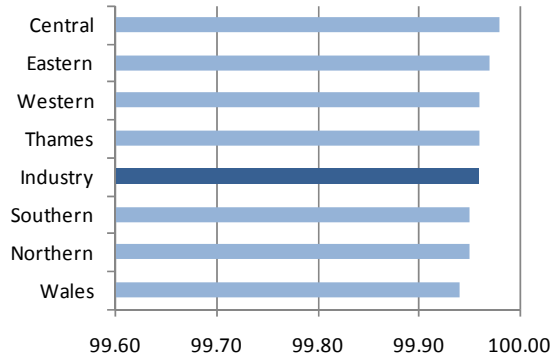
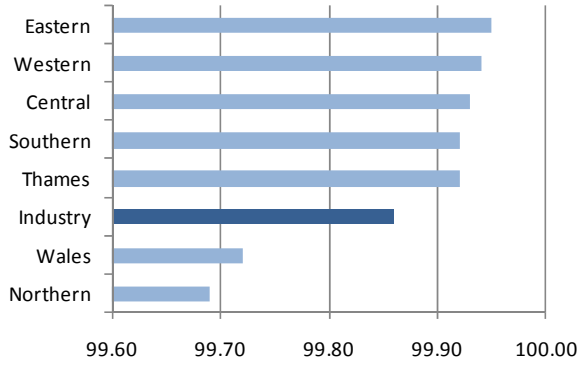


Figure 7 : Distribution maintenance



Challenges in meeting the European drinking water standards for lead and pesticides

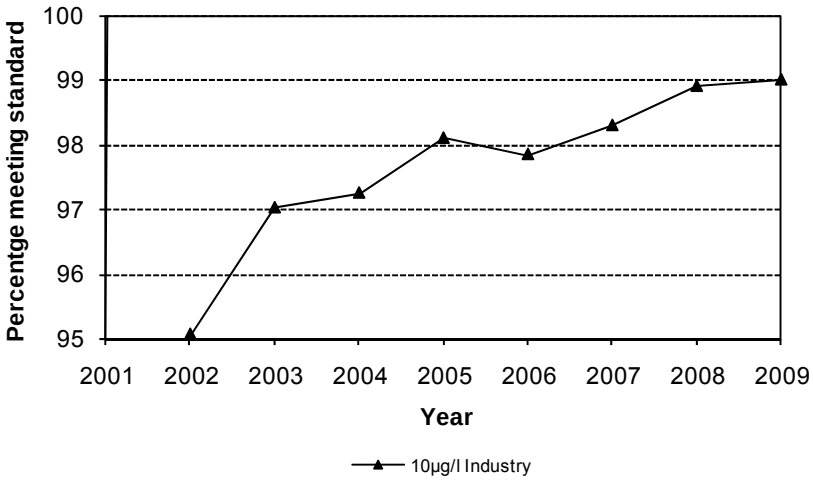
Looking forward the water industry faces two specific challenges in meeting the European Drinking Water Standards as discussed below.

Lead

The health based standard for lead becomes stricter across Europe in 2013. Lead is found in tap water only in those properties with older underground service pipes and plumbing. Good progress has been

made towards meeting the future stricter health based standard through companies being required to introduce water treatment in 1,285 out of 1,670 water supply zones over the last decade. The water treatment acts by building up a protective coating on the internal surface of pipes which over time minimises release of lead into water. This water treatment policy has been targeted to those water supply zones where testing at taps verified an ongoing risk. Figure 8 shows the benefit accruing from this public health policy in terms of the progressive year-on-year improvement in samples meeting the future standard for lead. Generally, exposure of the population to lead through drinking water has fallen as evidenced by the mean annual concentration of lead, for England and Wales combined, falling to 1µg/l in 2009 compared to 2µg/l four years ago.

Figure 8: Percentage of samples meeting the future standard for lead



The Inspectorate has calculated that if the stricter standard for lead had been in force in 2009 then the industry figure for overall compliance with all drinking water standards would have been 99.93%, instead of 99.95%. This demonstrates how water treatment alone is insufficient to secure safe drinking water for all. Accordingly the Inspectorate has required water companies to prioritise collaborative work with local authorities and health professionals to address consumer exposure to lead in drinking water in those areas where the risk from older housing stock remains. Studies have shown that replacement of the company's section of a lead service pipe is not an effective remedy if old lead plumbing is allowed to remain within a property. The expectation of the Inspectorate is a step change by companies in the scope and pace of delivery of community water safety action plans on lead in drinking water.

Pesticides

A single parameter, pesticides, was responsible for the slight downturn in overall industry compliance with drinking water standards reported this year. Pesticide failures across England and Wales accounted for one third (387) out of the total of 1,103 failures of standards in 2009 and the cause was a single substance, metaldehyde, used in some pellets for the control of slugs in arable crops. This substance has a low mammalian toxicological profile and it is a valuable agricultural product. Unsurprisingly, the water catchments most affected by this hazard are mainly in arable farming areas in the Central, Eastern and South Eastern regions of England. Since the problem was first recognised towards the end of 2007, there has been co-ordinated catchment management action by regulators, industry and agronomists and this is now resulting in improvements in farming practice and river water quality. At the levels found in drinking water, the Health Protection Agency has advised that metaldehyde does not pose any risk to human health, however, it cannot readily be removed by today's water treatment technology. Its presence in drinking water has an adverse impact on public confidence because it breaches the very strict European drinking water standard that applies to all pesticides irrespective of their differing profiles of risk to human health.

For all the above reasons, the Inspectorate has taken a risk-based remedial approach by putting in place legally binding programmes of work for companies to carry out catchment control, raw water monitoring and research into water treatment technology in relation to directly affected water supplies. During 2009 companies have reported that concentrations of metaldehyde in raw water have been falling. Additionally slug pellet sales were approximately 70% lower than in 2008. Awareness of the issue among farmers is rising and practices relating to the supply, use and spreading of slug pellets are improving generally. It remains to be seen whether this catchment management approach will be sufficient to bring the affected water supplies back into compliance with the pesticide standard within the timescales set.

Drinking water quality events

This is the first year of reporting on water quality events using the Inspectorate's new risk-based approach to classification and assessment. Events are classified into five categories: Not Significant, Minor, Significant, Serious and Major. In total, there were 422 events across the industry in 2009 and 352 of these were in England. Around one-third (146) of all events were of a type that necessitated a detailed investigation by an inspector but only five were serious and just one necessitated a major investigation. Two of these serious events were in England, one in the area served by Wessex Water, the second in the area served by Severn Trent Water.

The report summarises and shares the lessons learnt from all investigations by inspectors during the year. In terms of the Inspectorate's risk-based focus, a major area of work of inspectors was auditing and enforcing improvement in relation to the adequacy of disinfection arrangements. In particular, but not exclusively, this has

necessitated high level regular dialogue with three companies; Southern Water, United Utilities and Dŵr Cymru Welsh Water. These companies are responding positively with programmes of work to improve assets, maintenance or monitoring arrangements at many treatment works. As described in the body of the report, Southern Water recently pleaded guilty to three offences of failing to adequately prepare, disinfect and continuously operate an adequate treatment process at Matts Hill works in November 2008 in contravention of Regulations 26(1)(a) and 26(1)(b) and 26(3). This was an important prosecution which should assist the industry's understanding of the arrangements that must be in place to demonstrate that public health is being safeguarded and the risk of outbreaks of waterborne disease is being kept as low as practicable. The Inspectorate will be taking this learning forward through a workshop with the industry.

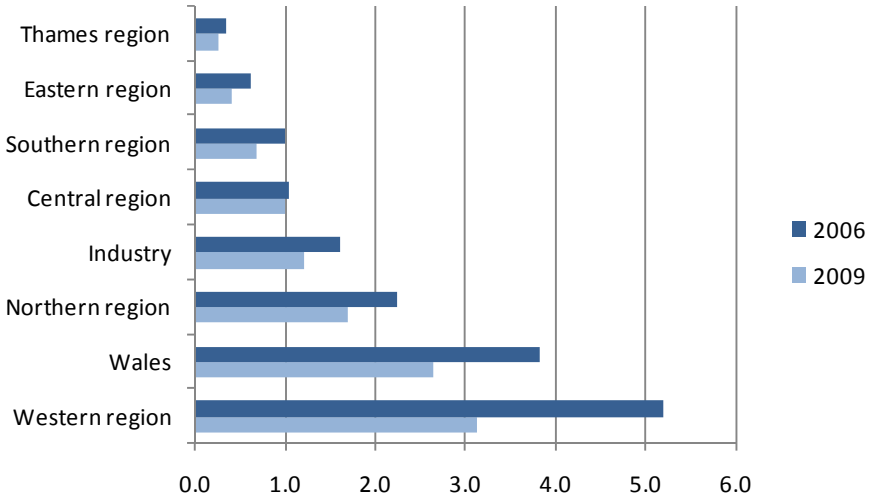
Public confidence in drinking water

There is a longer term and positive improving trend in public confidence in drinking water quality, as measured by consumers. The Inspectorate receives data on the number of people contacting water companies to express concern about the quality of their tap water. Compared to three years ago the rate of such contacts across England has fallen from 1.5 to 1.1 per 1,000 population.

Discoloured water has been a pronounced problem for many years in some English regions, notably in the South West and North of England. The figures for 2009 are encouraging and demonstrate the benefit flowing from water companies' long-term strategic investment programmes in water mains refurbishment which commenced after privatisation and are now all complete. Overall the number of consumers reporting discoloured water across England is down to 55,702 from 76,245 recorded three years ago. However, regional variations remain as shown in Figure 9 which also shows the improvement since 2006.

In areas where the discoloured water problem has been a particular public confidence issue, the regional reports contain maps to illustrate the generally improving situation, and highlight where localised problems persist and need to be dealt with by companies. Whilst welcoming the improvement, the Inspectorate will continue to expect water companies to prevent the occurrence of discolouration by appropriate implementation of distribution operation and maintenance strategies.

Figure 9: Regional consumer contact rate per 1,000 population for discolouration in 2006 and 2009.



Also included in the report is information describing all the schemes of work that companies have delivered to improve drinking water quality in 2009, together with details of the further work planned for completion over the next five years. The evidence of need for each scheme of work is independently assessed by the Inspectorate before it is confirmed as necessary through the putting in place of legally binding agreements detailing the work the company intends to undertake and the timetable for delivery. The independent scrutiny of the Inspectorate ensures that the public can be confident that local deficiencies in drinking water quality are being identified and addressed in the most cost effective and technically appropriate way by water companies.

Fit for purpose drinking water quality regulation.

During 2009, the government took steps to safeguard the health of those consumers who are served by about 26,000 private water supplies in England. Similar legislation was introduced by the Welsh Assembly Government in Wales. Details of the new risk-based regulations and how they will work are described in the report, together with a case example showing how the new powers have been put into immediate and good effect by one local authority in England. This change marks an important step forward, action can more readily be taken by local authorities and private supply owners together, to improve those private supplies that are known to pose a risk to health and the information provided to the Inspectorate will enable open reporting on all drinking water supplies. Also, in relation to larger private water supplies, the Inspectorate will now be able to report fully to Europe on compliance with the Drinking Water Directive, which is a legal duty of the UK as a member state.

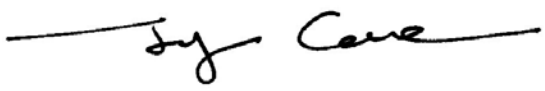
Late in 2009, the European Commission notified the UK government of the need to rectify deficiencies in some aspects of how the 1998 Drinking Water Directive had been transposed into law in England, Wales, Northern Ireland, Scotland and Gibraltar. The major issue was the delayed introduction of appropriate legislation covering private water supplies in England and Wales. However, the Commission also identified gaps in the enforcement regime when standards are not met in public buildings and also in relation to minimising by-products of disinfection. The Inspectorate provided expert technical and regulatory advice to Defra, the devolved administrations and equivalent regulators in Scotland and Northern Ireland. The Inspectorate also undertook, for Defra and the Welsh Assembly Government, urgent consultations on the issues with local authorities and the water industry. The required changes to regulations came into force by the end of April 2010 as required by the Commission.

Also in 2009, the Better Regulation Executive (BRE) audited the Inspectorate for compliance with the Statutory Code of Practice for Regulators. In its published report, BRE was very positive stating that the Inspectorate is 'a well-respected regulator held in high regard by the industry it regulates'. BRE also concluded that 'the Inspectorate has produced a targeted and proportionate approach to inspection focused on high-risk areas'.

The Inspectorate's risk-based approach to drinking water regulation has been recognised internationally in two ways: the Inspectorate has been awarded collaborating centre status by the World Health Organisation for drinking water safety and regulation; and risk assessment is currently being evaluated for adoption across Europe in the next revision of the European Drinking Water Directive planned for 2011.

Our robust fit-for-purpose regulatory arrangements will continue to be important in order to address the anticipated challenges to maintaining the safety and quality of drinking water going forwards.

Yours sincerely



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