



National Audit Office

The Maritime and Coastguard Agency's response to growth in the UK merchant fleet

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 131 Session 2008-2009 | 11 February 2009

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30 January 2009

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SUMMARY

Background

1 Our report focuses on how the Maritime and Coastguard Agency (the Agency) has responded to growth in the UK registered merchant shipping fleet, following a government drive to increase its size. The Agency is an executive agency of the Department for Transport and is part of the UK Maritime Administration. Its principal responsibilities are: promoting and enforcing high levels of maritime safety and security; preventing pollution from ships; and maintaining the

quality of ships on the UK Ship Register anywhere in the world. It does this through its own in-depth surveys of some aspects of UK vessels, its assurance of the work of independent bodies such as classification societies in surveying other aspects of UK vessels, and general inspections to check that UK vessels comply with all relevant standards. It also monitors the quality of foreign ships visiting UK ports; maintains a register of seafarers qualified to UK standards; and issues certificates of competency to seafarers who qualify in the UK.

2 In 2000, the Government introduced tonnage tax as part of a package of measures designed to reverse the long-term decline in the UK registered merchant shipping fleet. Tonnage tax allows a company operating a vessel controlled from the United Kingdom to opt to pay tax on the basis of its tonnage rather than the profit on the vessel's trading activities. Since then the number of merchant vessels joining the UK Ship Register has increased substantially, reversing the decline in the UK trading fleet and changing its character with implications for the volume and location of the Agency's work.

- By the end of 2007 the UK registered merchant fleet had grown from 1,050 to 1,518 vessels. Of these, 646 vessels were trading vessels compared with 417 vessels in 2000.
- Ships are larger, with the average gross tonnage increasing from almost 11,000 gross tonnage to over 19,000 tonnage.
- The trading pattern has changed: over half of the fleet did not visit a UK port in 2007 against a third in 2000. The Agency carried out one quarter of its survey and inspection work for merchant vessels overseas in 2007-08 compared to 5 per cent in 2000-01.
- The Agency issued 4,722 Certificates of Equivalent Competency to seafarers trained overseas in 2007-08 compared with 3,244 in 2003-04, an increase of 46 per cent.

3 The rate of growth in the fleet slowed to 10 per cent in 2007, compared with 40 per cent between 2001 and 2003 and future growth is vulnerable to factors outside the Agency's control. Some shipping companies told us that they are deferring decisions on whether to flag to the UK until a European Union review of tonnage tax regimes and proposed legislative changes affecting the terms and conditions of seafarers working on UK registered ships are resolved.

Key findings

4 This report is not an evaluation of the success of the UK's merchant shipping tax policy, but evaluates how the Agency has handled associated growth in the merchant fleet while continuing to assure the quality of the UK flag. Following the drive to increase the UK registered merchant fleet, the Agency faces significant challenges as its capacity to meet ship inspection targets is stretched; international competition for skilled mariners intensifies; and competing flags improve their performance, eroding the UK's quality advantage.

On planning for and responding to growth in the UK Ship Register

5 Increasing workloads and shortages of marine surveyors mean that the Agency needs to improve its planning of work and resources.

- Prior to the introduction of the tonnage tax in 2000, the Agency did not make specific plans for handling the workload associated with potential growth. The Agency responded as growth in the fleet increased its workload by implementing a series of measures such as delegating more of the survey work related to the construction of a vessel to classification societies. It still retains in house the survey work related to safety standards and all the inspection work. Since 2000, it has conducted more surveys and inspections and met or exceeded most of its targets for these with fewer marine surveyors (around 160) than it employed during the 1990s (180). However it missed some of its targets for inspections of UK vessels for the first time in 2007-08, and expects to miss them again in 2008-09. Failure to meet its targets will increase the risk that UK vessels which do not comply with regulations operate without detection in UK ports and waters.
- The Committee of Public Accounts recommended in 2002, that the Agency should gear recruitment and training strategies to meeting a potentially higher demand for well-qualified surveyors. That demand has materialised and increasingly the Agency is carrying vacancies for marine surveyors. The pool from which it recruits surveyors is diminishing and there is increasing competition for suitably skilled candidates.

6 The Agency has consistently failed to achieve full cost recovery from fees to owners for its survey work.

On the quality of the UK flag

7 There are signs that the quality advantage of the UK flag, which came from its high standing in international rankings, is starting to erode, even though the Agency's strategy is to attract quality ships, and it has increased the proportion of surveys and inspections carried out on UK registered vessels. Increasingly the UK is competing with other Flag States to attract merchant ships to the UK flag. The proportion of UK vessels detained overseas because they are not fit to go to sea remains amongst the lowest for any flag state, but the rest of the world is catching up. Overseas administrations in the North Atlantic trading area, the main trading area for UK flagged vessels, are finding a greater proportion of UK merchant vessels with shortcomings compared with international standards (known as deficiencies). This increase has been greater than for other flag states.

8 Agency surveyors generally identify more deficiencies during their general inspections of UK vessels than overseas inspectors. But the opposite is true of pollution-related deficiencies. Ships' masters were positive about the standard of Agency services but owners had mixed views about the quality of service they receive.

Conclusion on value for money

9 The Agency did not plan how it would handle the growth in the UK merchant fleet prior to the introduction of the tonnage tax. As growth materialised it relied largely on delegating more survey work to the classification societies and its existing staff resources. The level of these resources had not changed over the years in line with the decline in the fleet. As the fleet increased, the Agency used its staff resources more efficiently. Until recently it had met its targets for inspections and its plans for surveys, but it is now struggling to meet its inspection targets. The Agency has maintained the quality of the UK flag in terms of the accident rate for UK merchant vessels and the proportion detained overseas because of shortcomings relative to international standards. But its quality advantage in its main trading area – the North Atlantic – has been eroded as other flags have improved and overseas inspectors are finding more defects on UK flagged vessels. Despite these challenges, the Agency's achievement in supporting the growth of the merchant fleet without significant extra resources has been an efficient use of taxpayers' money.

Recommendations

On growing the flag

10 **The Agency did not have a strategy in place to deal with the potential increase in the UK registered merchant shipping fleet.** Given continued change in the growth and nature of the worldwide merchant fleet, increased competition from other flags and mixed customer perceptions of the service they receive from the Agency, we recommend that the Maritime and Coastguard Agency:

- assesses the prospects for the size and composition of the UK fleet over a rolling five year period, and develops regularly updated plans for carrying out its core responsibilities as a flag state which consider the likely range of scenarios;

- improves customer service, particularly for the operators and owners of smaller vessels by:
 - customer services managers making themselves known to, and meeting at least annually with, all significant operators assigned to them;
 - gathering feedback from customers on standards for survey, inspection and registration activity, for example by using electronic survey methods similar to those employed in this report to gather the views of ships' masters, and take account of the feedback received; and
 - allowing ship owners and operators to preview electronic versions of ships' registration certificates which the Agency proposes to issue to give them an opportunity to check for errors.

On making better use of marine surveyor resources

11 **Higher workloads and vacancies for surveyors contributed to the Agency missing its targets for inspections in 2007-08.** A competitive labour market in the wider shipping industry makes it more difficult to fill vacancies. We recognise the need for the Agency to maintain a credible in-house survey capacity, but it is also important that the Agency delegates sufficient survey work for it to be able to handle the remainder effectively itself without compromising its inspection efforts. The Agency should:

- develop a recruitment strategy to fill its current surveyor vacancies, aimed at filling surveyor posts at all levels of experience, including a graduate recruitment scheme;
- make effective use of surveyors' time by seeking to schedule survey work in advance through liaison with ship owners and operators;
- in the face of difficulties in recruiting and retaining enough skilled surveyors to meet its workload, the Agency should adopt a strategic method for delegating more survey work to classification societies, rather than using delegation to cover gaps as they arise.

On cost recovery

12 **Survey costs have not been fully recovered.** Within limits imposed by regulations and HM Treasury guidance, the Agency should work with the Department for Transport to review survey and certification fees regularly and set them at levels more likely to achieve full cost recovery.

On improving the quality of the UK flag

13 The gap between the quality of UK flagged vessels and those of other flags is narrowing. The Agency should:

- use information from its own survey and inspection database and international databases to monitor differences between the results of its own and other administrations' inspections of UK registered vessels, so as to highlight deficiencies identified by overseas inspectors which the UK does not appear to pick up;
- analyse and advise surveyors on the reasons for increases in the deficiency rate of UK vessels in the North Atlantic trading area;
- integrate those data systems which will make it easier to identify risk trends and patterns, so that the Agency can target its survey, inspection and assurance activities; and
- increase the proportion of inspections of UK merchant vessels which are performed on high risk vessels.

14 The Agency assures itself of the quality of procedures and practices of classification societies, but performs limited monitoring of the outcomes of their work. The Agency should highlight those deficiencies found during inspections of detained or heavily deficient UK vessels, which classification societies should have picked up during a recent survey, to supplement existing arrangements to assure the quality of societies' work.



PART ONE

The Agency's role and growth in the UK merchant fleet

1.1 In this part we explain the roles of the Maritime and Coastguard Agency and other bodies in relation to the UK merchant fleet; we review the growth of the UK merchant fleet; and we set out the scope of our examination.

The roles of the Maritime and Coastguard Agency

1.2 The Maritime and Coastguard Agency (the Agency) is an executive agency of the Department for Transport. It is responsible throughout the UK for implementing the UK government's maritime safety and environmental protection policy. The Agency's main roles are to:

- provide a 24-hour maritime Search and Rescue service;
- prevent pollution from ships and minimise the effects of pollution incidents; and
- maintain the safety, security and environmental standards of commercial vessels flying the UK flag (the "flag state" function), and of foreign vessels visiting UK ports and waters (the "port state" function), and the safety of seafarers serving on those vessels.

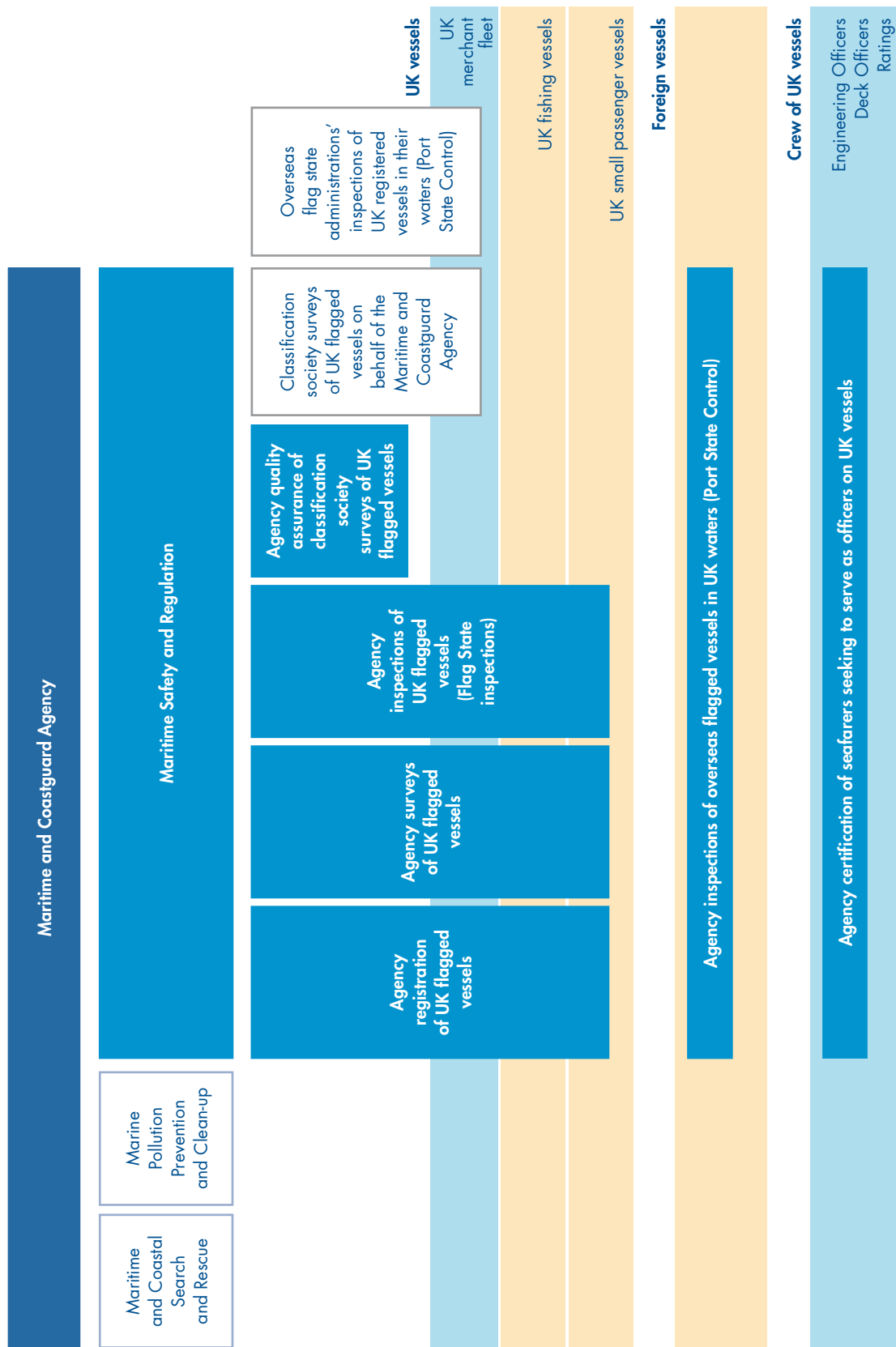
1.3 This study focuses on the last of these roles as it relates to the UK merchant fleet, though it also considers how growth in the merchant fleet has impacted on other parts of the Agency's maritime regulation remit. **Figure 1** shows that the Agency's regulatory function covers UK vessels, including fishing and small passenger vessels as well as merchant vessels. Its functions cover both

registration of vessels and their survey and inspection by Agency surveyors. For merchant vessels the Agency's own surveys and inspections are part of a wider regime including surveys by bodies, usually classification societies – recognised by the Secretary of State, and inspections by overseas administrations when UK vessels visit their waters. The Agency has a role in assuring the quality of surveys done by recognised bodies on UK vessels. The Agency also administers the issue of certificates to seafarers qualified to serve as officers on UK vessels, and inspects overseas vessels using UK waters.

1.4 During 2007-08, the Agency had operating costs of £144 million and spent around £39 million on its flag and port state responsibilities. Of this £39 million, the Agency spent around £8.1 million on statutory services, marine surveys, seafarers' examinations and certification and registration of vessels, for which it received some £8.5 million from fees and charges, with under recovery of survey costs being offset by over recovery on seafarer certification and ship registration in that year. The Agency employs around 1,160 staff and is supported by around 3,500 volunteer coastguard rescue officers (**Figure 2 on page 10**).

1.5 In a typical year, the Agency: deals with 17,000 search and rescue incidents; responds to almost 100 pollution incidents; carries out around 4,000 in-depth surveys of UK registered vessels and 6,000 inspections of foreign and UK ships; issues some 8,000 certificates that allow seafarers to work at sea; deals with around 100 breaches of UK shipping legislation; and maintains a register of around 1,500 UK registered merchant ships.

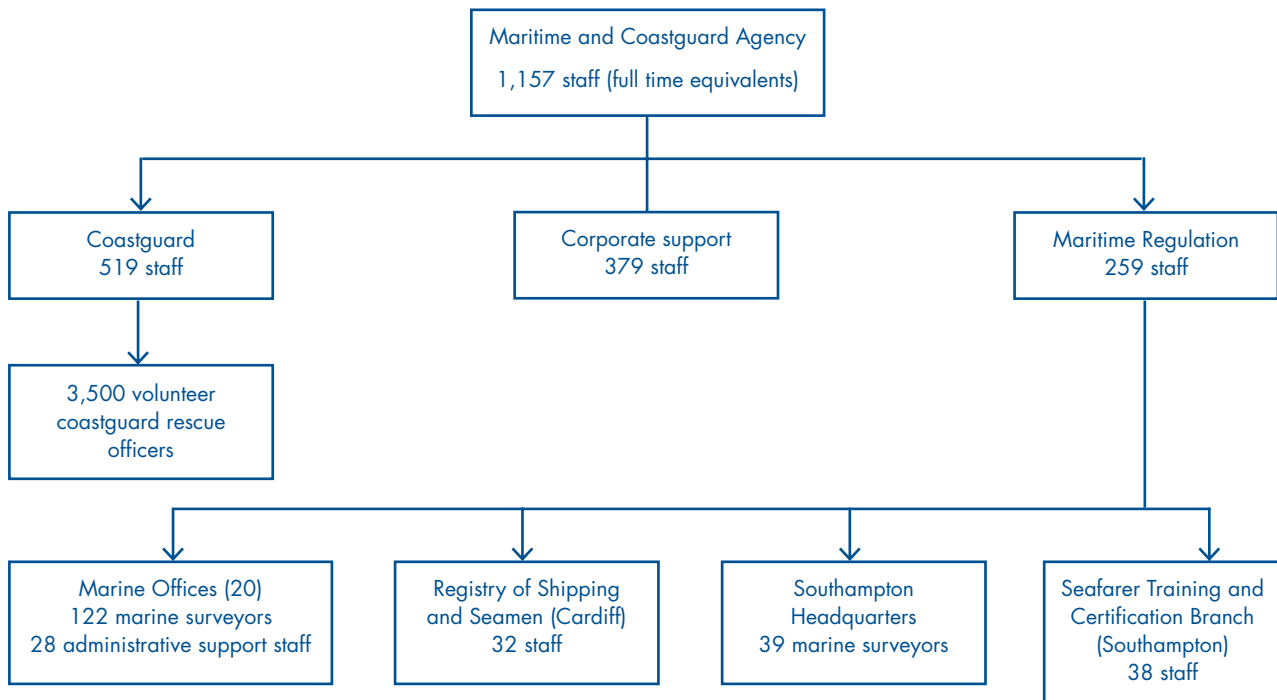
1 The Role of the Agency in Maritime Regulation



Source: National Audit Office

- Agency work considered by this report
- Agency work not considered by this report
- The UK merchant fleet and crew considered by this report
- Survey and inspection work carried out by external organisations and not covered by this report

2 Maritime and Coastguard Agency staffing



Source: Maritime and Coastguard Agency

NOTE

The staffing figures show staff in post for November 2008.

Drive to increase the UK merchant fleet

1.6 In 2000, the Government gave companies which operate ships that are “strategically and commercially managed in the UK” the option of taxation on the basis of tonnage, rather than paying corporation tax on the profit from a ship’s activities. The tonnage tax regime is attractive to owners as it gives greater certainty and for some a lower tax burden. It does not follow, however, that because a vessel is strategically and commercially managed from the UK it will also be flagged here. There is no link between tonnage tax and UK registration. The rules on where ships in tonnage tax may be registered look at the proportion of a company’s vessels registered in the European Union/ European Economic Area as a whole, not just the UK. Similarly a number of ships are registered in the UK but managed outside the UK and so do not qualify for tonnage tax. Vessel owners are likely to look for an attractive package of tax regime and flag state administration. Those flags with a high reputation for quality are attractive as vessels flagged with them can be subject to fewer inspections by other maritime administrations.

1.7 The tonnage tax was part of a package of measures designed to reverse the decline in the UK merchant fleet and allow the UK shipping industry to achieve its full economic potential. A number of benefits were envisaged.

- The location of vessels’ strategic and commercial management in the UK would both encourage those vessels to join the UK flag (which does not mean they have to operate out of UK ports), and support associated maritime industries such as ship financing, insurance and logistics.
- There would be more ships’ officer training opportunities for EU citizens resident in the UK as owners opting into tonnage tax are required to commit to increase such opportunities.
- A larger UK merchant fleet would support the UK’s commercial profile as a centre of maritime industry and give the UK more influence in international fora which set standards for all vessels plying in UK waters.

- Bringing ships which ply UK waters under the UK's survey and inspection regime by encouraging them to join the UK flag also allows more direct influence over their standards.

The UK Chamber of Shipping commissioned research from Oxford Economics which estimated that, in 2006, the UK's shipping industry contributed about £5.2 billion directly to gross domestic product (£11 billion if indirect and induced effects are taken into account), directly employed 98,000 people and helped support a further 141,000 jobs. It estimated that of those directly employed, 36 per cent were UK seamen. The research estimated that the UK operated shipping industry was between three and five times the size it would have otherwise been if tonnage tax had not been introduced.¹ Our report is not an evaluation of the success of the UK's merchant shipping tax policy, but evaluates how the Agency has handled associated growth in the merchant fleet while continuing to deliver its flag state responsibilities.

Duties of a flag state administration

1.8 As part of its flag state administration role, the Agency:

- **assures the quality of bodies** authorised by the Secretary of State to survey and issue certificates that confirm UK vessels comply with statutory standards relating to specific aspects of the vessel itself including construction, equipment and machinery. Shipping owners can choose the surveying body from seven authorised bodies (Recognised Organisations), which are generally classification societies like Lloyd's Register or the American Bureau of Shipping that exist to assure owners that vessels conform with the societies' technical rules on the design and construction of ships.² There is close alignment between these rules and UK and international maritime requirements so the societies' surveyors can check compliance with both when they visit a vessel. Over 85 per cent of survey work on UK vessels is delegated in this way;
- **conducts surveys or audits** focusing on ship safety management and operating systems such as emergency preparedness, bridge procedures and cargo operations, under the International Safety Management Code which is a standard for the safe management and operation of ships and for pollution prevention. The Agency also seeks to carry out at least one out of every five annual safety equipment certificate renewal surveys on UK registered cargo ships; and approves ship security plans and issues international ship security certificates for UK cargo vessels;
- **conducts general inspections** of UK vessels to check they comply with all relevant standards. The Agency inspectors may at all reasonable times board vessels to carry out such inspections. The key differences between surveys and inspections are set out in the box below;
- **maintains a register of UK vessels** and considers applications from owners wanting their vessel to join that register. Owners pay fees to be on the register;
- **maintains a register of certificated seafarers qualified to serve as officers on UK vessels**, and considers applications from individuals wishing to become qualified. Seafarers pay for these services. Flag states are responsible for ensuring that crews on their vessels meet international standards. Seafarers wishing to serve as officers on UK vessels need a Certificate of Competency issued by the Agency based on medical fitness, attainment of core seafaring skills and sea time. As part of the certification process, Officers are required to pass an oral examination conducted by an Agency surveyor. Officers holding a Certificate of Competency issued by an overseas administration that the Agency has approved may request a Certificate of Equivalent Competency from the Agency, after demonstrating their ability to communicate in English and relevant knowledge of the UK maritime legal and administrative process; and
- **provides technical input to the development of international maritime policy**, including representing the UK in International Maritime Organisation, International Labour Organisation and European Union negotiations.

¹ *The Economic contribution of the UK shipping industry*, Oxford Economics, Winter 2007.

² The UK recognises seven classification societies: Lloyd's Register, the American Bureau of Shipping, Bureau Veritas, Det Norsk Veritas, Germanischer Lloyd, Registro Italiano Navale (RINA) and Nippon Kaiji Kyokai.

Surveys and inspections

Surveys. Under international maritime law all vessels are required to hold relevant, up to date safety certificates. Surveys are periodic and mandatory and are undertaken either by the Agency's surveyors or a recognised classification society prior to issuing or renewing certificates. They cover specific items such as construction, equipment or operations on board a ship and are required: before vessels enter service; when foreign vessels enter the UK register; when certificates expire; or when there are major changes in the vessels structure and use. Certificates are valid for between one and five years and may require intermediate surveys at set intervals.

Vessel owners must ensure that surveys are undertaken and, with the exception of security related surveys and, currently, International Labour Organisation inspections, pay for them.

Inspections. Inspections are selective and cover the whole vessel rather than specific areas. They are carried out to check that the conditions under which a vessel's certificates were issued still hold. The Agency's marine surveyors carry out general inspections and they are not delegated to classification societies. Inspections are often carried out by an Agency surveyor at the same time that he or she is conducting a survey of a specific aspect of the vessel.

The surveyor determines the scope and depth of an inspection but they are generally not as comprehensive as surveys which examine a particular aspect of a vessel's structure, equipment or operations. Any deficiencies found during an inspection are recorded and the owner is required to take action within a certain period of time to remedy them. Where the deficiencies are significant, a surveyor may detain the vessel until satisfied that the deficiencies have been remedied. There is no charge for inspections.

1.9 All maritime nations have powers to carry out inspections of overseas vessels visiting their ports to check compliance with all relevant standards under the port state control regime, which is defined either by individual countries (e.g. the US Coast Guard regime) or groups of countries covering trading areas under Memoranda of Understanding. The United Kingdom as a member of the Paris Memorandum of Understanding (MoU), which covers the North Atlantic excluding the United States, performs such inspections on foreign vessels visiting UK ports. Other Port State Control regimes include the Tokyo MoU which covers the Pacific excluding the United States.

Growth in the UK ship register

The size of the UK registered merchant shipping fleet

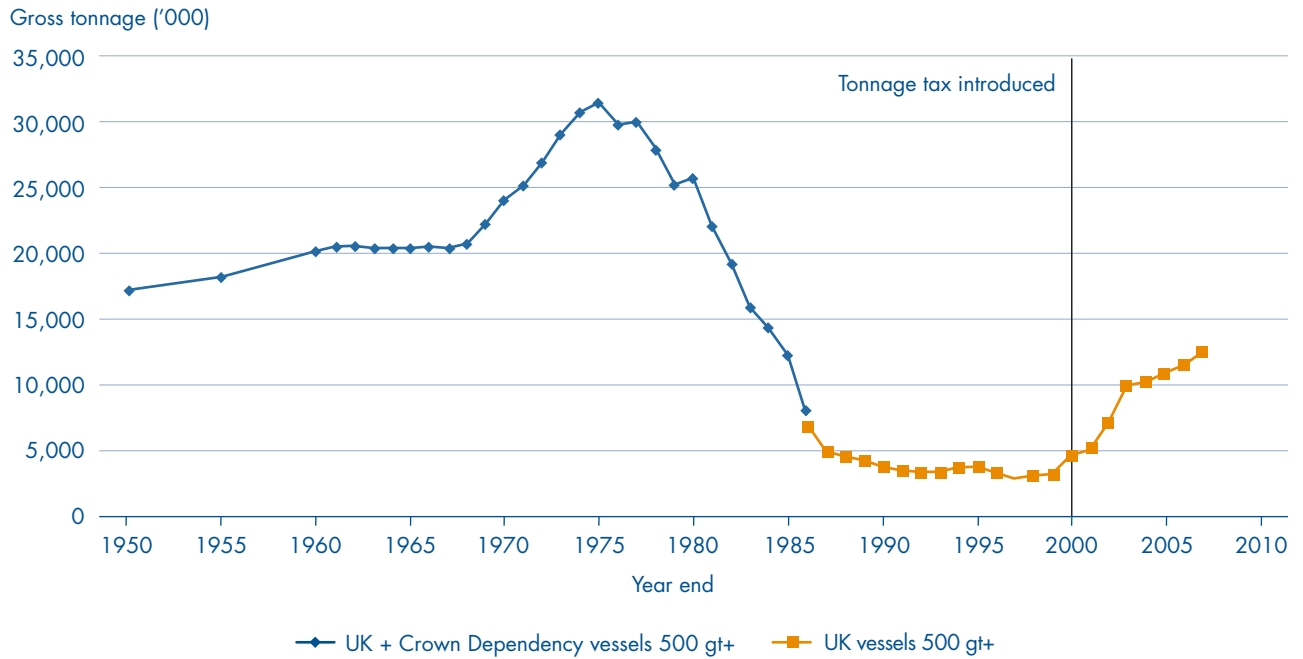
1.10 Until the late 1990s, the size of the UK merchant fleet had been in long term decline. The tonnage of trading vessels had fallen from a peak in 1975 of 32 million gross tonnage and 1,700 vessels, to under 3 million gross tonnage and 250 vessels in 1997 (**Figure 3**). Tonnage tax was introduced in 2000 and between December 2000 and December 2007 the size of the fleet recovered from 4.6 million gross tonnage (417 vessels) to 12.5 million gross tonnage (646 vessels). If non-trading vessels are included, the size of the UK merchant fleet had grown to over 1,500 vessels by the end of 2007, representing some 14 million gross tonnage.

1.11 The characteristics of the UK trading fleet (vessels of 100 gross tonnage and above) have also changed significantly since 2000. Larger vessels are registering to the UK flag. The average gross tonnage of trading vessels has increased from almost 11,000 gross tonnage to over 19,000 gross tonnage (over 70 per cent). The trading pattern of the UK trading fleet has also changed with over half of the fleet not visiting a UK port in 2007 against a third in 2000.

UK share of the world fleet

1.12 At 12.5 million gross tonnage (1.7 per cent), the UK's share of the world merchant trading fleet is small, but gross tonnage more than quadrupled between 1998 and the end of 2007. This growth comprised new vessels being registered for the first time as well as older vessels transferring from other flag states. We selected a sample of the principal fleets to compare the UK experience against its closest European neighbours in terms of fleet size and the fastest growing established international fleets, excluding those such as Cambodia that started from a very low base (0.4 million gross tonnage) and experienced growth to 1.9 million gross tonnage over the period. The UK's rate of growth was exceeded only by Hong Kong and the Marshall Islands (**Figure 4**). World fleet tonnage grew by 48 per cent over the same period.

3 UK registered trading vessels 1950 to 2007 (measured in gross tonnage, gt)



Source: Department for Transport Maritime Statistics

NOTE

Separate figures for UK and Crown Dependencies are not available before 1986 but the Crown Dependency fleet – primarily the Isle of Man – was small before that date.

4 Registered trading fleet tonnage 1998 and 2007 (100 gross tonnage and over)

Year	World	EU	China	Germany	Korea (South)	Singapore	Italy	Antigua & Barbuda	UK	Hong Kong	Marshall Islands
1998	500.3	120.1	15.3	7.4	6.1	19.2	6.1	2.5	2.8	6.3	6.0
2007	742.2	164.4	23.8	12.7	12.3	35.5	12.7	8.6	12.5	35.6	35.2

(million gross tonnage)

Source: Department for Transport Maritime Statistics

1.13 The sharpest period of growth occurred between December 2001 and December 2003, when growth rates for gross tonnage exceeded 40 per cent in each year. This growth was mainly due to three merchant shipping companies, Maersk, Hatsu Marine (now Evergreen) and Zodiac registering some 60 vessels representing over 2.1 million gross tonnage. Since the end of 2003, however, growth has slowed to less than 10 per cent (Figure 5).

1.14 The size and future growth of the UK fleet are vulnerable to factors outside the Agency’s control. The 12 representatives from the shipping industry that we consulted cited the financial advantages offered by the UK’s tonnage tax as the main reason for operating their businesses in the UK, or registering to the UK flag. Some shipping companies told us that they were deferring flagging decisions until the outcomes are known of:

- an ongoing European Commission review of Member States’ tonnage tax schemes which might affect the type of vessels that qualify and might exclude certain profits on passenger vessels, such as gambling, from the tonnage tax calculation; and
- a government consultation on whether to make Section 9 of the Race Relations Act 1976 compliant with EU law on the freedom of movement of workers. This consultation arose from a complaint

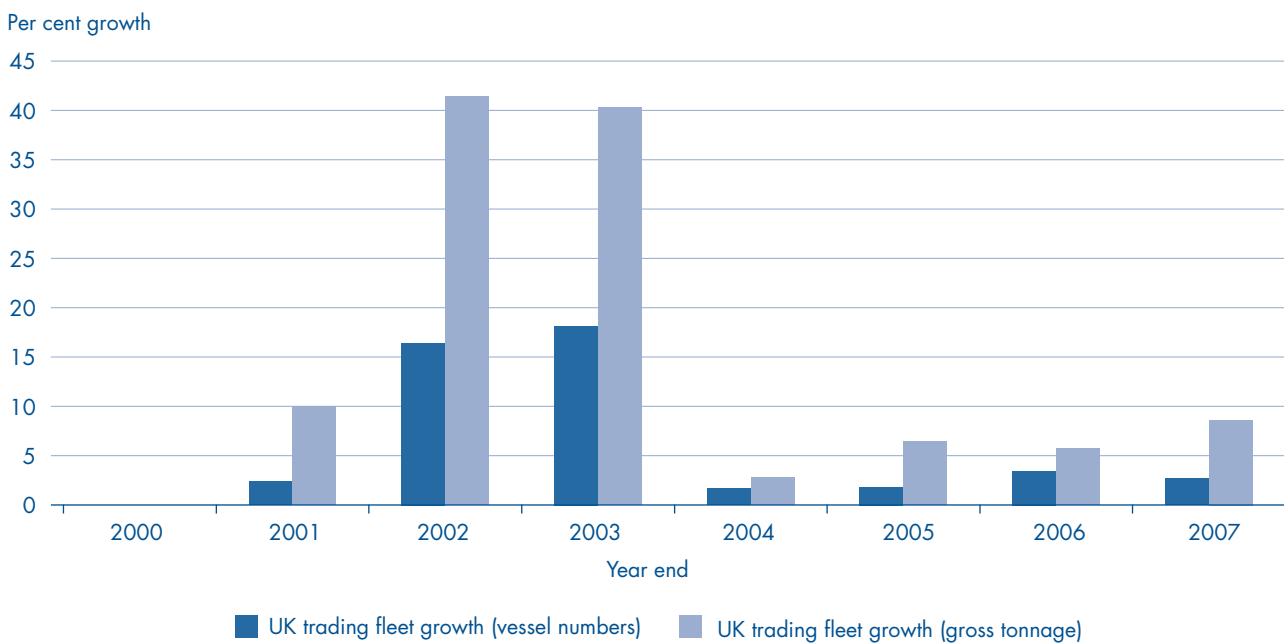
to the European Commission about wage discrimination on UK registered vessels. Changes might reduce the discretion that shipping companies have to pay different rates to seafarers on UK vessels who are normally resident in different EU nations.

Scope of our examination

1.15 This report examines the adequacy of the Agency’s response to the growth in the UK registered merchant fleet resulting from the introduction of measures such as tonnage tax. Our report examines specifically the Agency’s planning for and response to growth (Part 2); and whether the quality of the UK flag has been maintained (Part 3). Our methods are set out in Appendix 1.

1.16 We last reported on the Agency’s role in maintaining vessel standards in *Ship Surveys and Inspections* (HC 338 Session 2000-01). Subsequently the Committee of Public Accounts published its report (Nineteenth Report 2001-02). Appendix 1 sets out the Committee’s conclusions where relevant to handling growth in the merchant fleet, the Agency’s response and the current position.

5 UK registered trading fleet growth 1998 to 2007 (100 gross tonnage and over)



Source: National Audit Office analysis of Department for Transport Maritime Statistics



The Agency's response to growth in the UK Ship Register

2.1 In this part, we examine four aspects of the Agency's response to growth in the UK ship register:

- planning for growth in the register;
- actual changes in workload;
- adapting to changes in workload; and
- performance against plans and targets.

Planning for growth in the register

2.2 The stated objective of the tonnage tax was to reverse the decline in the UK merchant fleet. The timing of its introduction was known and followed a lengthy planning period. Yet, prior to the introduction of the tonnage tax in 2000, the Agency did not assess the impact of potential fleet growth on its workflows and resource requirements, and did not put in place plans to deal with it. The Agency did not carry out any detailed work to forecast potential growth until 2006 when it commissioned a consultant to review the Agency's marketing of the UK flag.

2.3 The Agency had no targets for growing the flag until February 2007, when it launched the UK Ship Register. The accompanying marketing strategy set a growth target of 7 per cent each year between 2008 and 2012. This target would be achieved by promoting the UK flag's quality reputation and customer service, and targeting key markets such as existing customers with large fleets, but with only a small proportion of their vessels registered to the UK flag, and shipping companies with large programmes of new ship construction.

2.4 The Agency has no plans for dealing with any further increase in the merchant fleet. Its response to workload pressures has been a mixture of delegation of some survey work to classification societies, and annual prioritisation of inspections between broad classes of vessels at national level.

Changes in workload

Surveys and inspections

2.5 Between 1999-2000, when the National Audit Office last reported, and 2007-08 the Agency's ship survey and inspection work increased by 33 per cent, partly reflecting the growth in the UK registered fleet. In particular:

- the number of ship surveys performed increased from 2,683 in 1999-00 to 3,902 in 2007-08;
- inspections of UK registered vessels (including fishing and small passenger vessels) increased 44 per cent from 3,616 to 5,205. Within this, inspections of the seagoing ships which make up the merchant fleet have increased moderately from 1,011 to 1,072 (6 per cent); and
- inspections of foreign ships declined slightly from 1,801 in 1999 to 1,639 in 2007-08. The UK is required to inspect 25 per cent of the ships using its ports under its Paris MoU obligations.

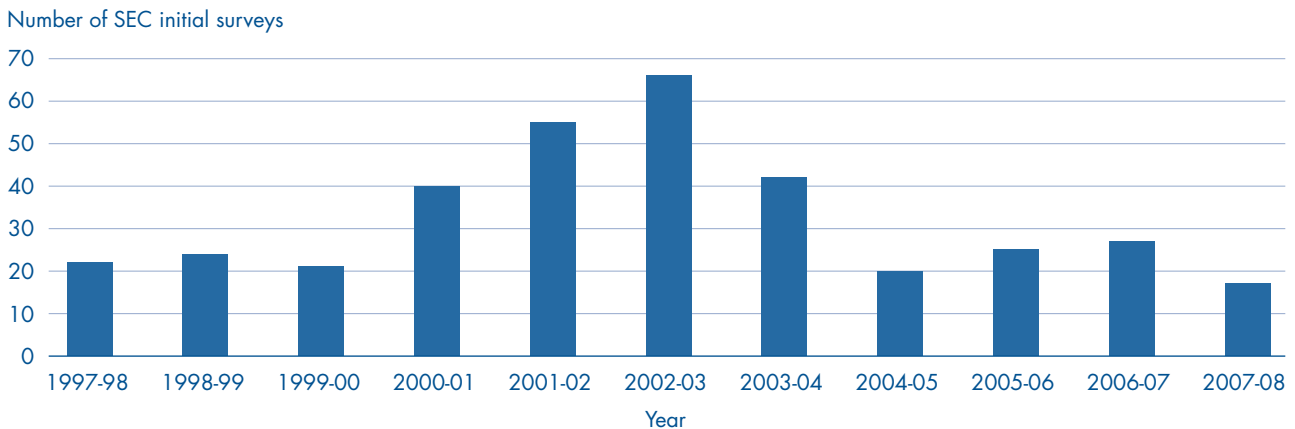
2.6 New ships or ships joining the UK Ship Register must undergo surveys for the issue of initial statutory certificates, such as Safety Equipment Certificates which the Agency’s marine surveyors will typically carry out. Between 1997-98 and 2007-08, the Agency carried out 360 initial Safety Equipment Certificate surveys on merchant ships. The number of these surveys peaked between 2000-01 to 2003-04 with 66 in 2002-03 alone reflecting the sharpest period of growth (paragraph 1.13 refers), but fell to 17 during 2007-08. (Figure 6).

2.7 As over half of the UK fleet did not visit a UK port in 2007, marine surveyors often have to survey and inspect UK flagged vessels abroad, travelling as far afield as Singapore, Uruguay and Australia. In 2007-08, the Agency carried out one quarter (around 450) of its surveys and inspections of merchant vessels overseas compared to 5 per cent in 2000-01. Overseas surveys are very time consuming and impact on the time marine surveyors have available to inspect vessels in UK ports. Vessel operators pay the Agency for surveys, including travel and subsistence and a capped amount of travel time, but the Agency pays for the inspections which are usually carried out in conjunction with them. Surveyors try to inspect other UK vessels when overseas for survey work, but they are not always able to do so.

2.8 Between 2000 and 2008, the Agency also took on new work, including:

- a UK safety management code for small vessels – the Domestic Passenger Ship Safety Management Code – that was introduced in November 2001. The Agency conducts audits of safety systems and their implementation to check compliance. It undertakes around 1,000 such audits each year, normally at the same time as the survey of the passenger certificate or the in-service inspection;
- the extension of Statutory International Safety Management (ISM) surveys to cargo vessels trading internationally from July 2002;
- in 2004, the Agency becoming responsible for implementing the International Ship and Port Facility Security Code (ISPS Code) which includes approving ship security plans and issuing international ship security certificates for ships on the UK Register as well as checking the compliance of cargo ships visiting UK ports. The Agency has a target to conduct 900 security-only inspections of vessels annually in connection with this duty, over and above its checking of security matters during general inspections; and
- under EU Directive 2001/106/EC which came into effect in July 2003, the requirement that member states of the Paris MoU carry out annual mandatory expanded inspections of “high risk ships” such as oil and gas tankers of certain ages and sizes. Typically, this requirement represents around 150 vessel inspections a year for the Agency.

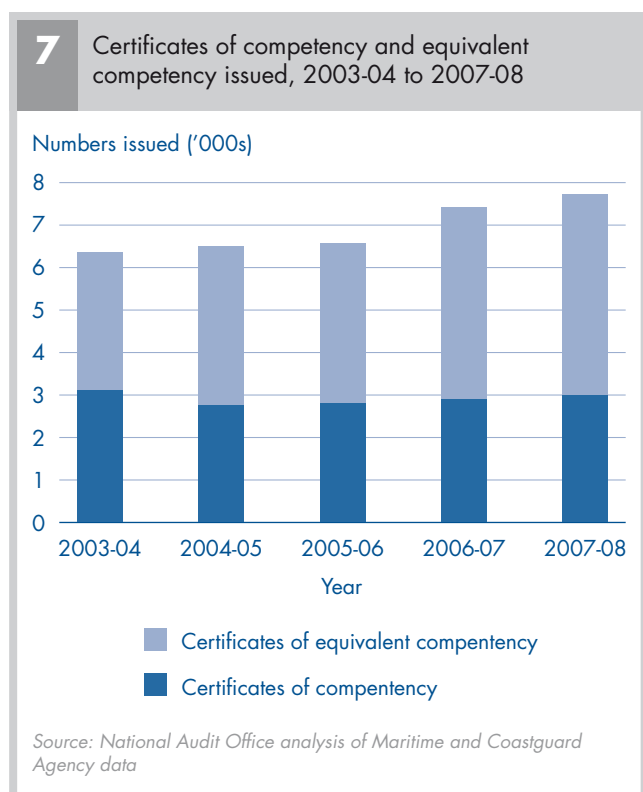
6 Number of Safety Equipment Certificate initial surveys, 1997-98 to 2007-08



Source: National Audit Office analysis of Maritime and Coastguard Agency data

Seafarer certification

2.9 Growth of the UK merchant fleet has also led to an increase in the number of certificates issued to seafaring officers. Between 2003-04⁴ and 2007-08, the number of certificates that the Agency issued increased from around 6,400 to 7,700 (Figure 7). This increase, however, was almost entirely attributable to growth in the issue of UK Certificates of Equivalent Competency to officers already holding a certificate issued by an overseas administration. The Agency issued 46 per cent more of these certificates between 2003-04 and 2007-08 (from 3,250 to over 4,700), reflecting the overall growth in UK registered vessels and the increasingly international nature of the labour market for seafaring officers. Over six out of ten certificates issued in 2007-08 were Certificates of Equivalent Competency. The slight increase in UK Certificates of Competency issued between 2004-05 and 2007-08 does not imply a growth in the number of UK citizens who are seafaring officers, since overseas citizens may apply to the UK for their first certificate once they meet qualifying criteria.



⁴ The earliest date for which data is available.

Ship registration

2.10 The growth in the UK Ship Register has led to a corresponding increase in the number of vessels joining the UK merchant fleet, from 39 vessels joining in 1998-99 to 167 in 2007-08. When a vessel applies to join the UK flag the Agency's registry staff in Cardiff check its eligibility by confirming its ownership, the nationality of the owning individual or company, and the ship's certificates.

Adapting to changes in workload

2.11 To accommodate the increasing workload, the Agency, and its marine offices, have taken a number of measures, including:

- delegating more survey work to the classification societies;
- some marine offices scheduling and planning survey work in advance; and
- recruiting more surveyors to carry out ship security audits and redeploying surveyors from headquarters to the Agency's marine offices.

Delegation of work to classification societies

2.12 In our previous report on Ship Surveys and Inspections, we noted that the Agency estimated it delegated around 80 per cent of statutory survey work on UK vessels to the recognised classification societies, such as Lloyd's Register. Since then, the Agency estimates that it has increased the proportion of work it delegates to around 85 per cent of a now bigger fleet.

2.13 There are two ways in which the Agency has increased delegation:

- Firstly, the Agency's Headquarters Survey Branch delegates survey work on a case by case basis when surveyors are unavailable or workload at a particular marine office is heavy. The decision to delegate is taken following a request from a marine office's surveyor in charge or a vessel operator, and after it has been assessed for risk using a structured assessment tool. Some marine surveyors in the Agency have been involved in industrial action since April 2007 in a dispute over pay and this has affected the amount of delegation. The action has taken the form of a ban on overtime with staff only working conditioned hours and banning out-of-hours coverage. During 2007-08 the Agency delegated 518 surveys which would not have been performed

by classification societies as a matter of course, including surveys of safety equipment, security certificate verification surveys and International Safety Management Code surveys. The Agency prefers to keep the latter survey type in-house as part of its role as a flag state administration, and will only delegate such work in exceptional circumstances.

- Secondly, the Agency introduced in April 2003, on a trial basis, the Alternative Compliance Scheme, under which owners, operators, designers and builders of UK flagged vessels can opt for a classification society to undertake most of the statutory surveys required on UK registered vessels rather than the Agency. The details of the Alternative Compliance Scheme are summarised in the box below. The Agency has authorised the seven classification societies it recognises to carry out such surveys on its behalf. The trial period will end in April 2010 when the Agency will evaluate the Scheme. By August 2008, over 240 vessels, representing some 35 shipping companies and operators were participating in the Scheme.

The Alternative Compliance Scheme

Under the Alternative Compliance Scheme, those classification societies recognised by the Maritime and Coastguard Agency are empowered to undertake the majority of surveys required on UK registered vessels. The Agency retains responsibility for audits required under the International Safety Management (ISM) Code and surveys required under International Labour Convention 178 (on the working and living conditions of seafarers on board ship). Entry to this scheme is conditional upon a satisfactory Port State Control record and the Agency issuing a certificate to confirm that it has undertaken a satisfactory inspection of the vessel. The certificate will be valid for five years subject to a further satisfactory inspection by the MCA at mid term.

2.14 There is concern among surveyors, and ship owners and operators that if the Agency delegated more of its survey work it would run the risk of losing the core capacity essential to maintaining a strong flag state role. Some ship owners and operators feel that difficulties in obtaining Agency surveyors to perform surveys were beginning to affect adversely the quality of service offered by the UK flag. The Agency considers that it is important for its reputation that it carries out hands-on survey work, but on some occasions it has to delegate work it would prefer its own surveyors to perform due to lack of availability.

Work scheduling

2.15 There is more scope to plan work so that the Agency makes the best use of its resources. All of the five marine offices we visited used electronic diary systems, but only the Tyne Marine Office reminds ship owners and operators of due dates for surveys using a computerised database of vessel survey renewal dates. This database enabled the office to plan and coordinate its survey work so that surveyors would be available to meet demand. At the remaining four offices, ship owners and operators are left to contact the marine office to arrange a suitable date for an interim or certification renewal survey. Owners can request surveys with as little as three days' notice, causing peaks and troughs in workload and making it difficult for the marine office to organise and allocate its surveyor resources.

Staffing

2.16 In 2001-02 the Committee of Public Accounts commented on the falling number of Agency surveyors and noted the Agency's difficulty in recruiting suitably qualified staff and the ageing profile of the workforce. The Committee recommended that the Agency should gear its recruitment and training strategies to meet potentially higher demand for surveyors coming from an increase in UK registered vessels, more detailed inspections of higher risk vessels and greater emphasis on human aspects of ship safety.

2.17 The number of marine surveyors in post in 2007-08 was 158 compared to a complement of 178. This shortfall particularly affected the Agency's marine offices which had a staff complement of 141, but only 122 staff in post. Surveyors told us that this shortfall was constraining their ability to undertake comprehensive surveys and inspections, and to achieve targets. Moreover, industrial action in 2007-08 compromised the Agency's ability to undertake inspections of high risk overseas flagged vessels at weekends.

2.18 The surveyor numbers cited above include four new surveyors and six new security inspectors taken on in 2004 to meet the Agency's responsibilities under the International Ship and Port Facility Security Code (ISPS Code). The Agency also trained and reallocated 25 per cent of its surveyors away from other survey and inspection work in the first quarter of 2004-05 to undertake this security work and support it on an ongoing basis.

2.19 The Agency still has problems with recruiting and retaining suitably qualified staff, and the situation is unlikely to improve in the foreseeable future. The Agency told us that recruitment and retention of marine surveyors is affected by:

- the age profile of its marine surveyors (**Figure 8**). Almost 10 per cent retired in the last five years and the proportion of older surveyors has grown steadily with over 40 per cent of surveyors aged 55 and over by 2007-08;
- a shrinkage in the pool of talent from which it recruits surveyors, in particular, ex-Merchant Navy deck officers and engineers. The Department for Transport's latest analysis of UK seafarer statistics

estimated that there were 12,100 UK certificated officers active at sea in 2007, about 15 per cent lower than in 1997. There were 1,430 officer cadets in training in 2007, almost double the equivalent number in 1999 (780), but the Department forecasts that the number of UK certificated officers will decline to 8,250 by 2023. The actual and forecast decline in certificated UK seafarers is largely attributable to the high average age of ship officers and engineers; and

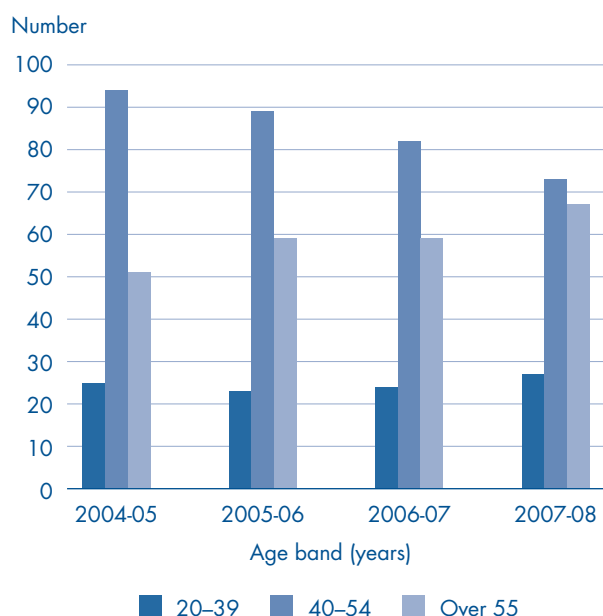
- the Agency facing increasing difficulty competing with the pay levels offered by shipping companies and the classification societies. Between 2003-04 to 2007-08, 10 out of 31 marine surveyors who resigned gave pay as a reason. The wage rates offered to certificated seafarers are increasing and these increases are attributable to the worldwide shortage of seafarers. This global shortage is forecast to become more severe in the future as the demand for certificated seafarers increases at a greater rate than supply.⁵ The Agency's capacity to respond is constrained as it is required to adhere to national public sector pay policies.

2.20 Taken together the permanent staffing of the Seafarer Training and Certification branch and Registry of Ships and Seamen increased from around 60 staff in 1999 to 80 staff in 2002 and has remained stable since then. But the Agency has recruited temporary staff to deal with peaks in demand, for example following the introduction of new standards for Seafarer Training, Certification and Watchkeeping. Most staff in these areas are administrative and clerical rather than qualified surveyors, so they are not subject to the supply constraints affecting surveyor recruitment and retention.

Cost recovery

2.21 The Agency aims to recover the costs of surveys, seafarer certification and ship registration from service users. Between 2000-01 to 2007-08, fee income for surveys grew by around a quarter, from £3.7 million to £4.7 million. (In 2007-08 prices, the increase in fee income from surveys is around five per cent.) The costs of inspections are funded by the taxpayer. Income from ship registration and seafarer certification amounted to almost £1.5 million and £2.3 million respectively during 2007-08.

8 Age profile of the Maritime and Coastguard Agency's marine surveyor workforce, 2004-05 to 2007-08



Source: National Audit Office analysis of Maritime and Coastguard Agency data

⁵ Source: *The Worldwide demand for and supply of seafarers*, International Shipping Federation / BIMCO / Institute for Employment Research (University of Warwick), 2005.

2.22 Between 1998-99 and 2007-08, the Agency has consistently under-recovered the costs of ship surveys from owners, amounting to a cumulative total of £5.4 million, or 12 per cent of costs. Survey fees are set by statute in terms of the hourly rate for survey work, currently £94 per hour set in September 2006, with a premium for out-of-hours or weekend work. The Agency may only charge up to four hours travel time for a survey in the UK, and up to ten hours in any one day for a survey overseas. Under-recovery may occur where actual hourly costs exceed £94, or where travel time exceeds these limits. As the number of overseas surveys increases the latter limit comes into play more often. The limits on the amount of travel time which may be charged are set by the fees regulations.

2.23 Ship registration has recovered the full costs of its activities over the same period. A cumulative deficit of £2 million for seafarer certification was accrued between 1998-99 and 2002-03, but fee income has broadly covered costs in each year since then.

Performance against plans and targets

2.24 A number of factors influence the setting of survey plans and inspection targets.

- Targets for the inspection of UK and Dependent Territory registered vessels are based on the risk posed by different categories of vessel (measured by a three year rolling average of deaths and accidents) and the Agency's available inspection resources.⁶ The target has increased from 3,354 in 1999-00 to 5,860 in 2008-09. Of this, planned inspections of seagoing vessels, mainly merchant trading vessels, increased by 30 per cent from 820 to 1,069 between 1999-00 and 2007-08.
- The Agency plans its surveys of UK vessels based on the current size of the fleet and the number of vessels where Agency surveys are due in the year ahead. Actual numbers depend on the number of surveys requested by owners which will vary as vessels join or leave the fleet (or are taken out of service or change use) during the year. The Agency increased its planned number of surveys from 2,800 in 1999-00 to 3,987 by 2007-08.

- For Port State Control inspections in the Paris MoU area, an EU Directive requires maritime authorities to inspect 25 per cent of foreign vessels that enter their ports based on a moving average of port arrivals in the previous three years. In 2007-08, the inspection target for the UK was 1,626 vessels. This target had remained fairly constant over the period 1999-00 to 2007-08 at around 1,680.
- EU Directive 2001/106/EC specifies the target for mandatory expanded inspections as 95 per cent of eligible vessels visiting a state's ports.

2.25 These targets are set either by Ministers or EU directives. They reflect judgements on the appropriate level of inspection effort necessary to ensure compliance with statutory standards for safety, security and environmental protection. If the targets for UK and dependent territory vessels are not met, the risk of non-compliant UK vessels operating without detection increases. Likewise, if the UK's targets for Port State Control and mandatory expanded inspections are not met, the risk increases of non-compliant overseas vessels operating without detection in UK ports and waters.

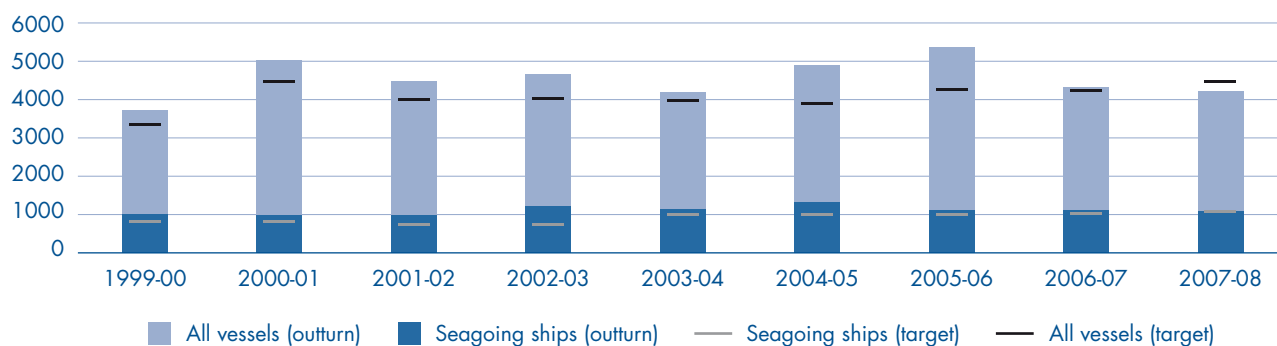
2.26 Until 2006-07 the Agency met or exceeded its targets for inspections of UK and dependent territory vessels (**Figure 9a**) and its plans for ship surveys (**Figure 9b**). But in 2007-08 it fell short of its targets for inspection of UK and dependent territory vessels, and performed fewer surveys than planned, partly because of the industrial action by some marine surveyors. The inspection shortfalls mainly affected small passenger and fishing vessels, with the Agency carrying out 783 of the 993 planned inspections of small passenger vessels (79 per cent); and 1,151 of the 1,283 planned inspections of small fishing vessels. Targets are based on the number of vessels expected to operate. The Agency told us that some of the shortfall for small passenger vessels may be because some vessels are out of service and not eligible for inspection. The Agency met its target for seagoing UK and dependent territory ships, inspecting 1,072 against a target of 1,069. The Agency has consistently met or exceeded its targets for Port State Control inspections of overseas vessels (**Figure 9c**). The Agency expects it will not meet all its inspection targets for 2008-09 and has advised its marine offices of priorities within the overall programme, giving highest priority to achieving the Port State Control inspection target.

⁶ Ships registered in Crown Dependency and UK Overseas Territories such as the Isle of Man, Gibraltar, Bermuda and the Cayman Islands count towards this target. In 2007-08, around 8 per cent of inspections of seagoing ships were of non-UK registered vessels.

9 Survey and inspection work 1999-00 to 2007-08

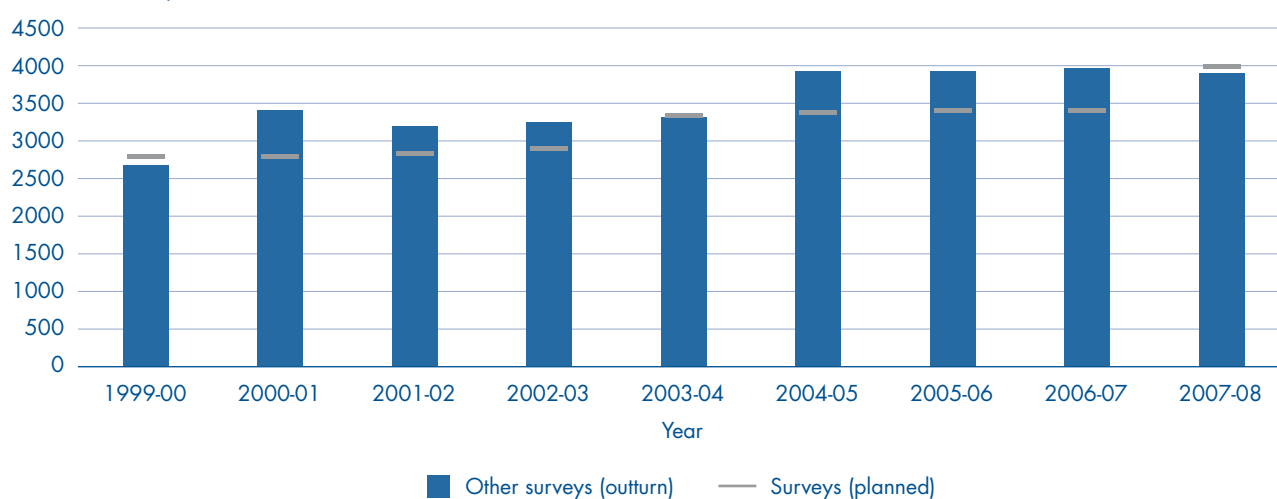
a. UK and Dependent Territory vessel inspections: targets and outturn

Number of inspections



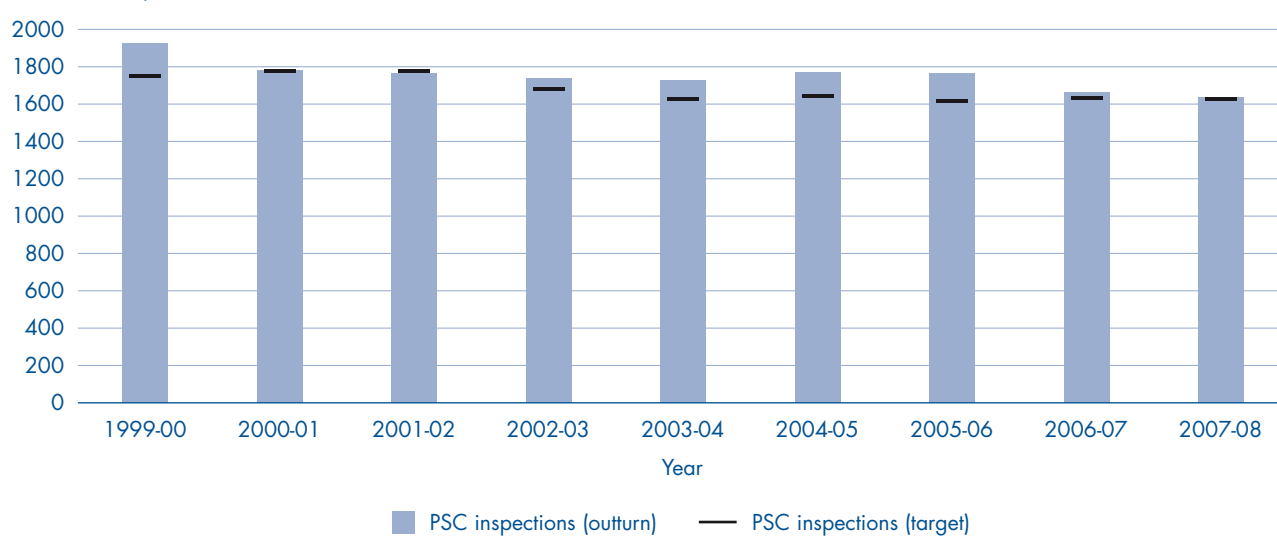
b. UK vessel surveys (excluding domestic safety management audits): plans and outturn

Number of surveys



c. Port State Control inspections: targets and outturn

Number of inspections



Sources: Maritime and Coastguard Agency; and Comptroller and Auditor General's Report, Ship Surveys and Inspections (HC 338, Session 2000-01)

2.27 The Agency has never achieved its target of carrying out 95 per cent of mandatory expanded inspections of “high risk vessels” (**Figure 10**). In 2007-08, 21 of the 139 vessels eligible for inspection by the Agency were missed. For five inspections a surveyor was not available,

for seven the vessel was in port overnight or not long enough for an expanded inspection, twice the eligible ship did not notify its arrival and seven were missed for other reasons.

10 Achievements against targets for surveys and inspections

Target	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Deliver the programme of planned ship inspections ¹	109% Achieved	104% Achieved	117% Achieved	121% Achieved	101% Achieved	95.7% Not achieved
Ensure that 95 per cent of mandatory expanded inspections are carried out	No target	No target	83% Not achieved	93% Not achieved	93% Not achieved	84.9% Not achieved

Source: Maritime and Coastguard Agency

NOTE

¹ The planned programme of ship inspections includes Port State Control inspections as well as inspections of UK registered and Dependent Territory vessels.



Quality of the UK flag

3.1 In this part we examine the effectiveness of the Agency's efforts to assure the quality of the UK flag. We look at: the UK flag's performance against key measures of quality; the Agency's work to improve the quality of vessels applying to register with the UK flag; and its inspection of UK flagged vessels.

The UK flag's performance against key measures of quality

The ranking of the UK flag in international league tables

3.2 Overseas maritime administrations inspect UK vessels when they visit their ports within the framework of Port State Control regimes. When a maritime administration finds that a ship does not comply with regulations, and the deficiencies are serious, it can detain the ship in port and instruct the master to remedy them before departure. The detention rate measures the proportion of inspections which result in a detention. The average detention rate in the most recent three years is a key indicator of flag quality. It determines each flag state's position in "White List" rankings by the Paris and Tokyo Memoranda of Understanding, which are used to target Port State Control inspections, and are widely visible to the shipping industry, including insurers, and maritime administrations. The UK was top of the Paris MoU "White List" rankings in 2006 and fifth in 2007. The Tokyo MoU also ranked it fifth in 2007. The US Coast Guard does not maintain a "White List" but ranked the UK detention rate seventh lowest of the 33 flag states with more than 30 registered vessels which called at US ports in 2006. This favourable ranking made UK ships eligible for Qualship 21 status which reduces Port State Control targeting by the US.

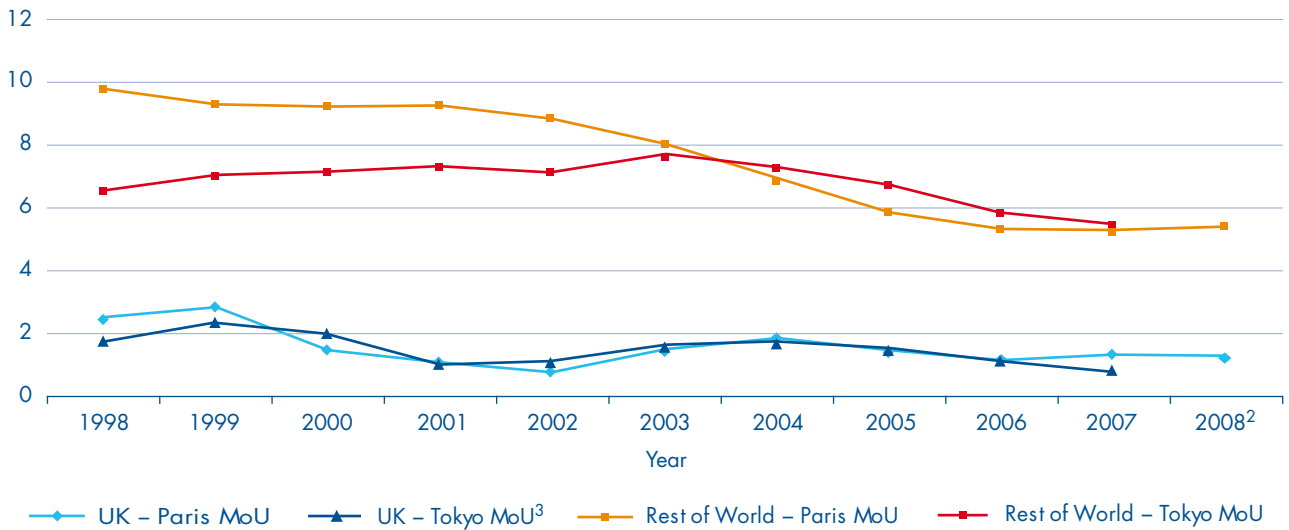
3.3 The gap between UK detention rates and those of other flags is narrowing (**Figure 11 overleaf**), reflecting improved performance by other flags. To some extent this is only to be expected since the initial low UK detention rate limited the scope for improvement. But it does reduce the value of the quality advantage enjoyed by the UK flag as a marketing tool.

The accident rate of the UK merchant fleet

3.4 The Department for Transport's Marine Accident Investigation Branch (MAIB) records all reported accidents involving UK registered merchant vessels. Reportable accidents are defined in regulations. They include events that cause major injury or death, events where a person is lost or falls overboard, and events involving loss of the vessel, serious damage, grounding, collisions or significant environmental harm. They also include specific events such as equipment failure or cargo movement where they might have caused serious injury or health damage. There is a legal requirement to report such accidents to MAIB. The number of UK merchant vessel accidents reported to MAIB was stable between 2000 and 2004, rose to a peak in 2005 but has fallen in the two subsequent years (**Figure 12 overleaf**). The accident rate per 1,000 merchant vessels has fallen more consistently, with the exception of the 2005 peak.

11 Detention rates – Paris and Tokyo Memoranda of Understanding 1998-2008¹

Detention rate – Average of three years to date shown (percentage)

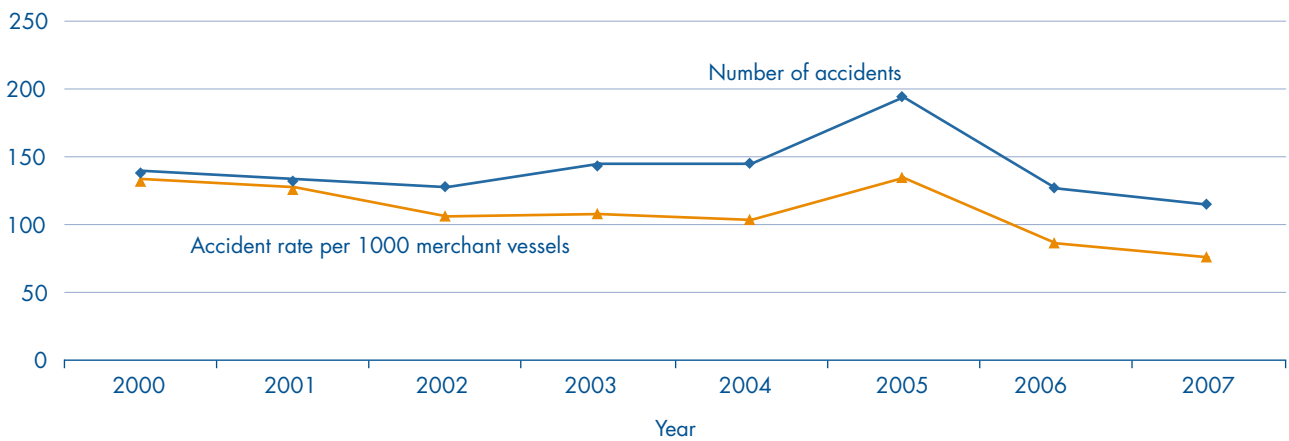


Source: Tokyo and Paris MoU Annual Reports 1995-2007 and Paris MoU data extract

NOTES

- 1 Detention rate is the proportion of inspections where the vessel is detained.
- 2 2008 Paris MoU data is for year to 27 July 2008.
- 3 There have been no more than 3 UK vessel detentions in Tokyo MoU in any one year.

12 UK merchant vessel accidents 2000-2007



Source: Marine Accident Investigation Branch Annual Report 2007

The deficiency rate of UK merchant vessels compared to other flags

3.5 Port State Control inspections also identify vessel shortcomings relative to international standards which require rectification but do not normally merit the detention of the vessel. These are termed deficiencies. The proportion of inspections showing one or more deficiencies is the deficiency rate, and is a widely used measure of flag quality. The introduction of new international requirements, or extension of existing requirements to a wider range of vessels, will tend to increase the potential for deficiencies and offset any underlying trend for greater compliance over time.

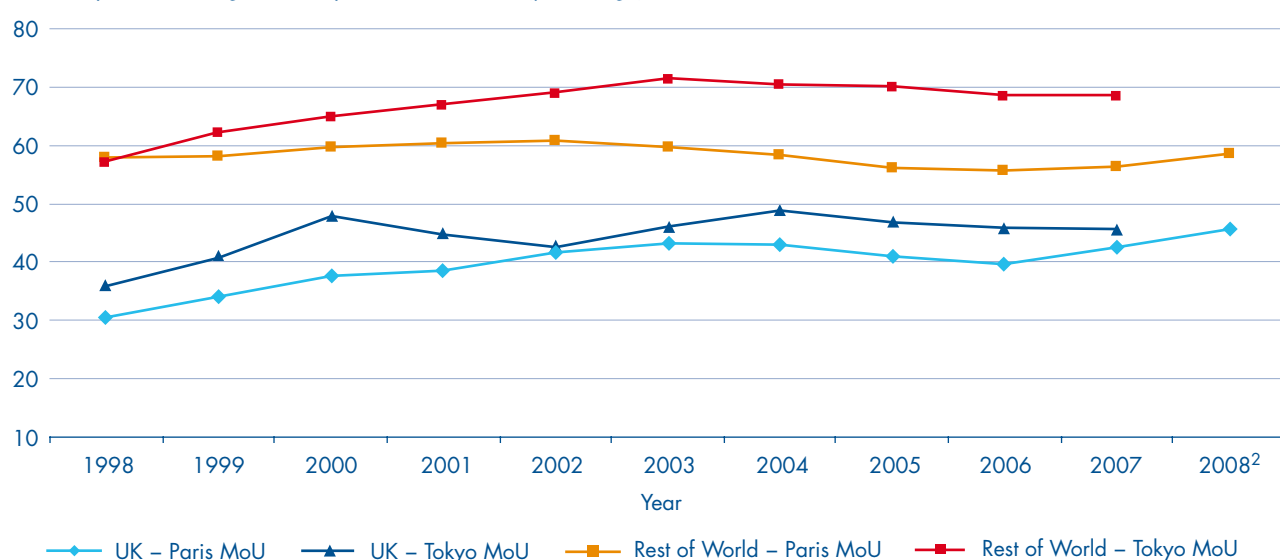
3.6 In 1998 the deficiency rate of UK vessels when inspected at both Paris MoU and Tokyo MoU ports was some 20 to 25 percentage points lower than that for the rest of the world (Figure 13). The UK maintained this differential in the Tokyo MoU area over the next ten years although deficiency rates for both UK and other vessels have increased. In the Paris MoU area the deficiency differential has narrowed to around ten percentage points. The UK vessel deficiency rate has risen while that for other vessels has remained broadly static. Appendix 3 gives comparisons between the UK and other selected flag states.

3.7 We reviewed changes in deficiency rates for UK vessels in the Paris MoU area between May 2004 and March 2008. The incidence of deficiencies for fire safety, vessel safety management systems, life saving appliances and safety of navigation increased most markedly. The deficiency rates in these areas remained at or below the world average, though the gap has narrowed.

3.8 We compared outcomes of Agency inspections of the principal seagoing vessel types (Class I and II passenger vessels and Class VII and VIII cargo vessels) with outcomes of Paris MoU Port State Control inspections of UK vessels. Figure 14 overleaf shows that for most types of deficiency the Agency's inspections were much more likely to record deficiencies than Paris MoU Port State Inspections. Hence owners of a UK flag vessel can be reasonably confident that, if they address the deficiencies recorded by an Agency inspection, and tackle any new faults arising during subsequent voyages, they are unlikely to fall foul of Port State Control inspection and suffer consequent delays or detentions. Three of the top four areas for deficiencies on Agency inspections were fire safety, vessel safety management and life saving appliances. These were all areas where the gap between UK and other vessels has narrowed. Tackling these areas will therefore be important if the UK fleet's deficiency record is to be improved.

13 Vessel deficiency rates in the Paris and Tokyo Memoranda of Understanding areas 1998-2008¹

Deficiency rate – average of three years to date shown (percentage)



Source: Tokyo and Paris MoU Annual Reports 1995-2007 and Paris MoU data extract

NOTES

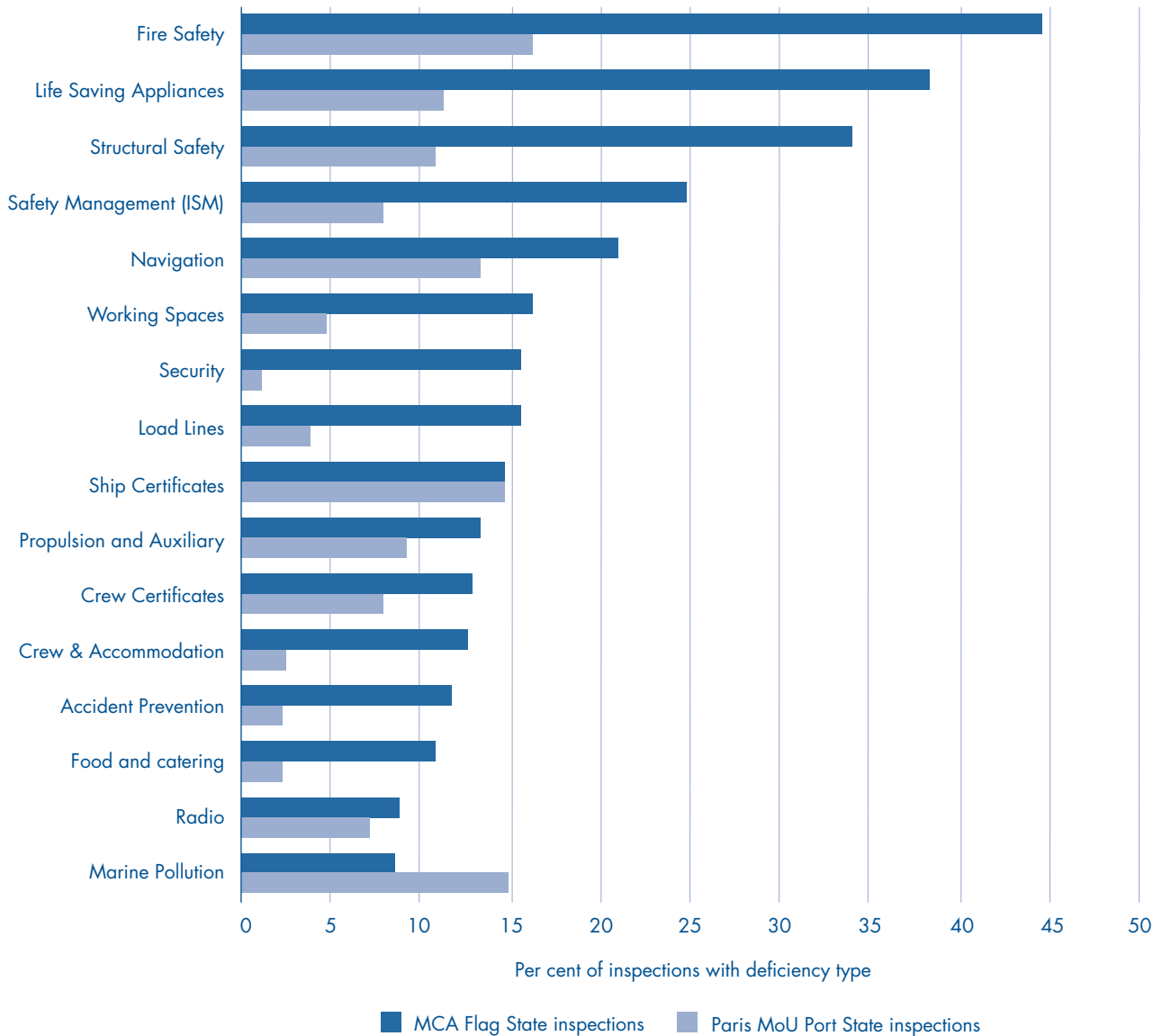
- 1 Deficiency rate is the proportion of inspections where one or more defects are found.
- 2 2008 Paris MoU data is for year to 31 October 2008.

3.9 There were two areas where Paris MoU Port State Control inspections were as likely, or more likely, than Agency inspections to record deficiencies: ships' certificates and the international convention on Marine Pollution (MARPOL). Such differences merit attention by Agency inspectors so that UK flagged vessels do not encounter Port State Control problems after receiving a clean bill of health by their flag state. The Agency's flag

state inspections do not currently look at these areas in the same depth as an overseas administration's Port State Control inspection. Moreover, most UK flag state inspections are undertaken in conjunction with a survey which the owner has scheduled, so any faults with pollution control equipment would probably have been repaired even if the equipment had been faulty for some period prior to the survey.

14 Outcomes of Flag State and Port State inspections of UK merchant vessels

Deficiency type



Source: Maritime and Coastguard Agency and Paris MoU

The Agency's work to maintain and improve the quality of UK vessels in the fleet

3.10 Joining the UK flag is associated with an improvement in vessel quality. We reviewed the inspection history of 134 ocean-going cargo vessels which had joined the UK register after 2000 and remained on it thereafter. This history covered 579 inspections of vessels under the UK flag and 874 inspections of those same vessels under their former flags. The average deficiency rate fell from 46 per cent prior to joining the UK flag to 40 per cent after joining it, a small but statistically significant difference against a background of overall rises in deficiency rates. This improvement cannot be directly attributed to the Agency's regulatory regime, since other factors such as ownership or operational control may change when a vessel changes flag. But it might indicate that the UK flag either tends to attract owners who pursue higher quality and deters owners who are less concerned about quality, or imposes higher standards on owners who might not otherwise have adopted them.

Flagging in process

3.11 We reviewed registry files for 40 merchant vessels joining the UK flag after 2003. We found that the Agency generally processed applications promptly and that applicants provided all the necessary declarations of eligibility, proofs of ownership and proofs of company registration, along with required certificates and notices confirming the vessel's markings show its new registration. We did find a problem with the accuracy of ships' certificates issued by the registry, where owners had to return a number to correct inaccuracies. Inconsistencies in ships' certificates can give rise to deficiencies or even detentions and so are not a trivial matter. As noted in paragraph 3.9, a deficiency in a ship's certificate is as likely to be picked up by a Paris MoU Port State inspection as by the Agency. Providing owners with sight of draft certificates in electronic form prior to printing and dispatch could avoid such errors.

3.12 The Agency has revised its flagging-in process during the 2000s, as it shifts its emphasis from securing growth to securing high quality growth. Since the start of 2002, the Agency refused 91 vessels' entry to the UK register following scrutiny of their application. It is difficult to remove sub-standard vessels once registered, however, and there is a legacy of poorer quality vessels from the early period of growth when flagging-in tests were not as demanding. It is not only legacy ships, however, which are found wanting at overseas inspections. Between January 2007 and March 2008, nine of the 18 UK vessels detained or found to have more than ten deficiencies when inspected by a Paris MoU member state had joined the UK fleet since 2003. Thus although the Agency has introduced tests to establish an effective quality standard at entry, there is still a need for targeted ongoing inspections to encourage ship owners and operators to maintain standards.

The Agency's inspection of UK merchant vessels

3.13 The Agency does relatively few risk-based targeted inspections of UK merchant vessels. It boarded ocean-going UK cargo vessels (Class VII vessels) 793 times in 2007-08, 632 of which were to undertake a scheduled survey (though in 430 of these surveys it also undertook a general inspection). Of the remaining 161 boardings, 94 were for radio only or security only inspections, leaving only 67 targeted general inspections.

3.14 The Agency's targeted inspection of UK merchant vessels is largely reactive, generally following incidents such as a detention, vessel damage, a crew complaint or a pilot report, or when vessel and surveyor availability coincide. Since our last report, and based on its recommendations, the Agency has introduced a pro-active risk-based targeting system for marine offices using ship type, age and inspection history. But when we analysed the reasons for 84 targeted inspections of UK merchant vessels at four marine offices we found that only seven of these vessels were selected on risk grounds.

Checking of seafarers' credentials

3.15 In considering applications for Notices of Eligibility to sit officer exams, Certificates of Competency or Certificates of Equivalent Competency the Agency checks supporting documents. These include records of sea service, testimonials, medical and eyesight certificates, short course or shore-based qualification certificates and proof of competency in English, where it is not demonstrated by some other aspect of a seafarer's qualifications. We reviewed a sample of 90 such applications to test the level of checks applied. We found the Agency reviewed the documents presented, insisted on seeing missing documents and validated overseas Certificates of Competency with the issuing administration in the majority of applications for Certificates of Equivalent Competency in our sample. This check was performed either by direct interrogation of those administrations' web-based registers or by email.

3.16 Six out of ten seafarers seeking UK certification as officers have already gained a Certificate of Competency from an overseas administration. The Agency must accept valid certificates issued by EU maritime administrations. Until recently, it has audited the administrations of all non-EU nations whose certificates it recognises. In the future, the Agency will not be able to accept certificates from any further nations unless these nations have been audited and recognised by the European Commission. However, the Agency will continue to perform its own checks on those non-EU nations to satisfy itself of the quality of their national administration and training institutions.

Perceptions of ships' masters, and ship owners and operators

3.17 We conducted a survey of ships' masters who had relevant experience of the Agency's inspection or survey work on a UK vessel. Of the 97 masters who responded, over 80 percent of those who expressed views felt that the overall standard of Agency inspections and surveys was good, and that the Agency's surveyors had the right skills to carry out survey work. The proportion feeling that the Agency's surveyors had the right skills for inspections was only slightly lower at 76 per cent. These results are

similar to those we received from ships' officers in 2000, so the perception of the quality of the Agency's work has remained consistently positive amongst these seafarers. Nevertheless, Nautilus (the ships' officers union) expressed concerns about trends in the workload of Agency surveyors and the quality of the UK fleet.

3.18 We also conducted a focus group of four ship owners or operators and interviewed representatives of a further eight such companies. Between them they covered most of the largest owners of UK merchant vessels as well as a selection of smaller operators. Views tended to differ between owners and operators of large ocean-going vessels and the owners of smaller vessels involved on shorter voyages. The former group had positive perceptions of the quality of the Agency's surveyors and its standards of customer service, including the ship registry and handling of seafarers' certificates; though some judged the Agency was reaching the limits of its capacity and surveyor availability was an increasingly limiting factor. The owners of smaller vessels perceived the Agency as struggling to recruit and retain staff and to match its avowed customer orientation with delivered standards of service. They cited inconsistency of surveyor judgments, difficulties arranging ship surveys, delays in processing seafarer applications and inaccuracies in vessel certificates, and a lack of engagement by Agency customer service managers. Despite these shortcomings, the owners of smaller vessels acknowledged that the Agency is listening to its customers more and standards of service had improved in recent years.

3.19 The Agency introduced customer satisfaction cards for surveys and inspections following our last report in 2001. The latest report on outcomes, compiled in March 2007, was based on 656 responses for surveys and 1,132 responses for inspections. Average scores for ship surveys were 90 or above out of 100 for all aspects except consistency, which scored 83. All aspects of ship inspections, including consistency, scored 90 or more out of 100. In May 2008 the Agency stopped issuing feedback cards because of the lack of informative data produced by them. The Agency is now considering what should succeed the customer satisfaction cards to help inform its customer strategy.

Quality assurance

3.20 The Agency has processes to assure the quality of its own survey and inspection activity and is accredited to ISO standard 9001:2000 for these activities. It has established a programme of internal peer reviews of surveyors' work, although surveyors frequently told us that it was often a casualty of workload pressures. Surveyors commented favourably on the online availability of central guidance and checklists, though 16 of the 25 we interviewed felt they could make more impact if databases were integrated and they had online access when they work away from the marine office. Surveyors in charge review and authorise any proposed detentions, which helps establish consistency at marine office level. Some ship owners and several surveyors commented on the diminution of headquarters capacity to support Agency wide consistency in recent years, and 15 of the 25 surveyors also cited better and more timely guidance from headquarters as a means of improving the impact of their work. The majority of surveyors interviewed for our previous study in 2000, also expressed reservations about the availability and quality of advice from headquarters. Since then the Agency has set up a network of Technical Performance Managers and Focal Points within each region to provide a source of expert advice to front-line surveyors and help improve consistency.

3.21 The Agency has also developed its processes for assuring the quality of work performed on its behalf by classification societies. It visits each of its seven recognised classification societies twice a year, and in 2003 the Agency started to conduct audits of classification society processes for a specific survey of a UK vessel, including witnessing work on board during that survey. The audits are performed at least once every two years for each classification society. The Agency targets these audits, based on the number of vessels in each risk category handled by each recognised society. But the Agency has limited information on the overall performance outcomes for each society when working on its behalf, since it does not separately identify or monitor those deficiencies highlighted in inspections which classification societies should have picked up at a recent ship survey.

The Agency's data systems

3.22 The Agency maintains a Fleet Management System, a Seafarer Certification System, a Survey and Inspection System and a time recording system for its staff. In addition each international Port State Control body maintains data systems to capture the characteristics of vessels inspected, the inspection itself, and the outcomes of inspections in terms of the number and nature of deficiencies or detentions. Classification societies also maintain extensive databases of details of vessels, owners, inspection outcomes and casualties. The Agency is currently participating in a project – "SafeSeaNet" – to develop an EU wide database of vessel movements, cargoes, safety and security. The Agency feeds into this database through its Central European Reporting System (CERS) of vessel movements and a Single Vessel Database (SVD).

3.23 These data systems are as yet poorly integrated and do not allow, for example, interrogation of the fleet management and inspection databases to compare patterns or trends in the quality of new joiners to the UK fleet with those of longer-standing fleet members. Nor do they facilitate analysis of the environmental and safety records of companies as evident from the performance of the vessels they own and/or manage. Data security and protection rules need to be observed, but these need not prevent more integrated use of the information available to the Agency and its surveyors.

3.24 In an environment where surveyor resources are scarce, and where people and behaviour are key determinants of vessel quality, it is important that the Agency uses all available information to assess risk and target resources effectively. At the same time there must still be room for skilled and experienced surveyors to apply judgment when they have an overriding reason to target a particular vessel on a particular day.

APPENDIX ONE

Previous Public Accounts Committee (PAC) conclusions relevant to the Agency's response to the growth of the merchant fleet: *Ship Surveys and Inspections*, Nineteenth Report 2001-02

Previous PAC conclusions: *Ship Surveys and Inspections*, Nineteenth Report 2001-02

PAC conclusion	Treasury Minute response	Current position
<p>The Committee's three main conclusions and recommendations were:</p>		
<p>1. The Agency needs to focus more of its work on the riskiest vessels, making more use of risk assessment systems particularly for UK vessels, and should consider undertaking fewer but more in-depth inspections of higher risk vessels.</p>	<p>The Agency is already using an international system for identifying high-risk foreign vessels. The Agency is now developing a similar system for UK vessels, which it expects to be in operation by April 2003; in the meantime, it is building on the risk-based approach developed by the NAO to set annual inspections targets for different types of UK vessel.</p>	<p>The Agency has used Formal Safety Assessment techniques to develop the balance of its targets between different types of vessel (fishing, small passenger and merchant) based on accident and casualty rates. But its targeted inspections of UK merchant vessels are primarily responses to incidents, reports or detentions rather than pro-active attention to high risk companies or vessels.</p>
<p>2. The Agency should give more attention to the human aspects of ship safety and the Department [for Transport] should establish a comprehensive whistleblowing facility for the reporting of deficiencies on vessels.</p>	<p>The Agency is increasing the emphasis on the safe operation of vessels within its inspection regime, as the International Safety Management (ISM) Code – an international standard for the safe management and operation of vessels – is being extended to cover more types of vessels. The Agency is training surveyors on the requirements of the Code and is issuing guidance and holding seminars to encourage them to pay more attention to the human aspects of ship safety.</p> <p>The Department is considering how best to establish a maritime confidential safety reporting system, intended to encourage a safety culture within the maritime industry, which it hopes to have in place by early 2003.</p>	<p>The Agency has retained responsibility for International Safety Management (ISM) audits of both whole companies and individual vessels, and developed its expertise in this area. It also offers quality assurance certification for shipping companies operating the ISM Code.</p> <p>The Confidential Hazardous Incident Reporting Programme (CHIRP) was established in 2003 as an independent confidential reporting system for all individuals employed in the maritime industry. CHIRP is a registered charity although the maritime section of CHIRP is funded by the Department for Transport. CHIRP is managed by a Board of independent trustees.</p>
<p>3. The Agency should take firmer action to uncover and pursue significant breaches of maritime legislation. It should review whether its training is effective in equipping surveyors to undertake enforcement procedures, and assess whether training allied with more risk-focused inspections increases the number of significant breaches identified and successfully pursued from the inspection programme.</p>	<p>The Agency is investigating why the number of reports of significant breaches of maritime legislation has increased over recent years and what action it should take to reduce the number that result in no further action. It plans to issue more comprehensive guidance to surveyors on reporting and following up significant breaches in the Autumn of 2002, and will train some surveyors and Coastguard officers in evidence gathering techniques during 2002-03. It will review the training delivered and also analyse the number of significant breaches identified at the end of March 2003.</p>	<p>Some of the Agency's surveyors indicated that a substantial number of reports of breaches came from commercial competitors in the small vessel sector, and turned out not to be significant in the judgement of surveyors when investigated.</p> <p>Guidance to surveyors to improve initial fact finding and a full Enforcement Manual was issued in 2004, which has since been regularly updated. Formal training has been provided to surveyors by an outside provider and is still available on an individual need basis.</p>

PAC conclusion *continued***Treasury Minute response *continued*****Current position *continued***

Completed cases of significant breaches are reviewed annually to consider what improvements could be made. Towards the end of 2008, the Agency was reviewing the definition of "significant breach" and was preparing further guidance on its practical interpretation.

On targeting inspections on the riskiest vessels

- iv) ...The Agency should... increase inspections at remote ports and at weekends where justified by an informed assessment of risk.

The Agency operates a system for identifying high risk foreign vessels and is actively developing a similar system for UK vessels. Where such ships are identified, inspections are carried out in remote ports and at weekends, as judged necessary taking account of factors such as Flag State, Class and inspection history of the vessel.

The Agency is developing a tool to monitor the number of inspections carried out at remote ports and at weekends. From July 2003, an EU Directive will require the Agency to inspect high risk foreign vessels wherever and whenever they enter a UK port.

The number of targeted inspections of UK merchant vessels is small – 67 nationally in 2007-08 – so the case for coverage of minor ports on a risk basis is limited. Weekend work on merchant vessels is performed but is normally reserved for scheduled survey work to meet customer requirements.

Inspections at weekends are limited, however, because the Agency does not have an agreement with surveyors on terms and conditions for weekend working.

On improving the effectiveness of surveys and inspections

- v) ...The Agency should gear recruitment and training strategies to meeting a potentially higher demand for well-qualified surveyors...
- xi) ...The Agency should... establish a defensible system of peer review... seek feedback from customers on the quality of their surveyors' work.

The Agency is reviewing its remuneration packages and is also introducing the position of trainee surveyor to help it attract, develop and retain the required staff.

It is also developing a peer review system, for implementation in early 2003, and carrying out customer satisfaction surveys to assess the quality of surveyors' work.

The Agency has a high level of vacancies and is struggling to meet its inspection targets. At the same time international demand for marine surveying and seafarer skills is increasing as the world fleet and shore-based maritime activity has grown.

The Agency's system of peer review is often a casualty of workload demands and feedback forms from ships masters were dropped in May 2008 because of budgetary constraints and the lack of informative data produced by them. The Agency is now considering what should succeed the customer satisfaction cards to help inform its customer strategy.

- vi) The Agency is improving the quality and currency of the advice and guidance provided to surveyors electronically on surveyors' laptops. In developing their management systems further, the Agency should also exploit the opportunities for such systems to underpin a more informed basis for planning future [survey and inspection] work, for example through surveyors recording details of all areas covered in a survey whether found to be satisfactory or not, and by retaining information about dangerous vessels.

To help plan future inspections, surveyors will record all of the areas that they have inspected on foreign vessels and identify dangerous vessels. The Agency will seek to do the same for UK vessels. The Agency is also examining the scope to establish an IT system through which ports would provide marine offices with timely and accurate information about vessels arriving in port.

Surveyors commented positively on the capacity to update and consult guidance when they are in the office, but lamented their inability to access online resources in the field.

The Agency is participating in the CERS/SVD data project which will allow vessel movements to be tracked and vessel arrivals at ports to be anticipated. The system will also show the risk factor associated with a vessel. The system does not currently cover all vessels however, and surveyors must therefore still gather intelligence from individual ports.

- vii) The Agency should conclude... discussions with Port Authorities ...to ensure that complete information is received daily and used to determine priorities for inspections.

PAC conclusion *continued***Treasury Minute response *continued*****Current position *continued*****On improving the effectiveness of surveys and inspections *continued***

viii) The Agency should consider the scope for... more inspections while vessels are in operation [at sea].

The Agency considers that surveyors can check general operational practices when vessels are in port, while there are legal and practical problems in inspecting vessels at sea. The Agency nevertheless carries out some inspections and checks at sea (mainly ro-ro ferries, class I passenger ships, small passenger ships and boats operated under Codes of Safe Practice) and will continue to do so where required.

Surveyors agreed that there would be advantages in undertaking more surveys or inspections at sea to test the efficacy of nominal procedures in practice. But time and resource constraints currently prevent an increase in this way of working.

ix) The practice whereby some [ship] owners arrange and pay for surveyors' overseas travel and accommodation costs may compromise the objectivity and independence of surveyors' judgements. The Agency's travel and subsistence rules should make it clear that the Agency, not vessel owners, should arrange and pay for surveyor's accommodation and travel, recovering the cost through fees.

Having written once already to bring this to the attention of relevant departments and agencies, HM Treasury will write to them again. The Agency will consult vessel owners as changes in the arrangements might affect them financially, before Ministers decide on what course of action to take in December 2002.

The Agency has agreed new arrangements with the National Audit Office under which the Agency normally makes the travel arrangements for surveyors as agreed with the vessel owners. Except in certain specified circumstances, the Agency will also make accommodation arrangements. Surveyors are always responsible for the payment of costs relating to accommodation, which are then reclaimed from the owner.

x) In their Ninth Report of 1998-99, the Committee's predecessor Committee drew attention to the risks presented by similar travel and accommodation arrangements operated by the Inland Revenue. Although the Treasury have drawn departments' attention to our predecessor Committee's conclusions this was not sufficient to prevent similar practices at the Agency. The Treasury should write to all departments and agencies that have an inspection or regulatory role to stress the importance of inspectors' or regulators' travel and accommodation costs being paid by departments and agencies themselves, rather than by those people or organisations being inspected or regulated.

On acting on the results of surveys and inspections

xiii) ...The Agency should publicise all [UK as well as foreign] vessel detentions. They should pursue all deficiencies found on UK vessels, either by revisiting the vessels or by obtaining written confirmation that deficiencies have been rectified.

The Agency will also publish details of UK vessels that have been detained because of serious deficiencies and now requires confirmation that deficiencies have been put right, either by surveyors revisiting a vessel or through written confirmation from the owners or operators.

In reviewing vessel files at marine offices we found evidence of letters to owners seeking confirmation of rectification of deficiencies, and chasing of responses when that confirmation was not initially forthcoming.

Source: National Audit Office

APPENDIX TWO

Methods used

1 This appendix sets out the principal methods we used to collect and analyse information for the study.

Overview

2 We carried out the fieldwork for this study between April and July 2008. Our study methods comprised:

- semi-structured interviews with key Maritime and Coastguard Agency (the Agency) and Department for Transport officials;
- document review;
- review of evaluative and other literature;
- quantitative analysis of the Agency's management information and maritime data held by other bodies such as the Department for Transport, the Marine Accident Investigation Branch and Lloyds Fairplay;
- review and testing of the Agency's procedures;
- structured interviews with surveyors at six of the Agency's marine offices;
- a census survey of the Agency's surveyors in charge based at marine offices around the UK;
- a web and electronic mail based survey of ships' masters;
- engagement with ship owners and operators;
- consulting key stakeholders in the shipping industry; and
- establishing an expert panel comprising academics with a specialist interest in the maritime transport industry.

Semi-structured interviews with key Agency and Department for Transport officials

3 We carried out semi-structured interviews with senior officials in the Agency and the Department for Transport to establish: the roles played by the Agency and the Department in growing the merchant shipping fleet; the impact of fleet growth on the Agency and the quality of the UK flag; and the Agency's responses to the challenges posed by growth.

Document review

4 We examined a variety of the Agency's documents to obtain evidence about: the Agency's planning for the effects of potential growth in the UK Ship Register and proposed and actual changes to the Agency's business, business processes and staffing in response to growth; the impact of growth on the characteristics of the UK fleet; the Agency's approach to surveys and inspections; the Agency's performance against targets; the Agency's monitoring of the quality of work done by its own surveyors and classification societies; and what the Agency does to encourage shipping companies to join the UK Ship Register. The documents we examined included Executive Board papers; performance monitoring reports; key performance data; quality assurance reports; strategy documents; and documents produced by consultants.

Literature review

5 Using internet searches, and the libraries of the London School of Economics and the International Maritime Organization, we carried out a review of evaluative literature in journals of marine policy and management; and reviewed international maritime literature in order to:

- fully understand the role of flag states in the implementation and enforcement of international maritime regulations;

- identify good practice and options available to the Agency in the survey and inspection of vessels, and the minimisation and control of risks to flag quality; and
- identify options available to the Agency to grow the flag.

Quantitative data analysis

6 We undertook our own interrogations of a variety of data bases and performed analyses of data in order to evaluate the performance of the Agency. In particular:

- we examined data drawn from the Agency's UK Ship Register and Department for Transport data on UK and world ship registration to establish trends in fleet size and growth over time, compare UK fleet growth with other comparable fleets and identify patterns in leavers and joiners;
- we analysed Maritime and Coastguard Agency management information on measures of workload such as seafarer certification, ship registration, and surveys and inspections;
- we examined Marine Accident Investigation Branch data on maritime accidents;
- we performed analyses on data drawn from the Agency's survey and inspection database (SIAS) to establish the number and type of vessels subject to survey and inspection, and the results of those surveys and inspections;
- to compare the quality of the UK registered merchant fleet with fleets elsewhere, we analysed data on detention and deficiency rates drawn from Paris and Tokyo MoU, and US Coast Guard Agency, databases of inspections of foreign vessels; and
- we drew on Lloyds Fairplay data to examine patterns in vessel movements, and inspection histories of fleet joiners.

Review and testing of the Agency's procedures

7 We visited the Agency's headquarters in Southampton and the Registry of Shipping and Seamen based in Cardiff to assess what the Agency does to:

- assure itself of the quality of the ships it flags in to the UK Ship Register;
- ensure that the seafarers to whom it issues certificates of competency and equivalent competency are qualified to serve at sea; and
- assure the quality of the work delegated to classification societies.

8 We examined:

- the Agency's planning for potential growth in the size of the UK merchant fleet;
- the impact of merchant fleet growth and the Agency's response to growth in terms of changes to business processes and resource requirements;
- how the Agency promotes the UK flag to merchant shipping companies and barriers to that growth;
- the Agency's support of customers that have vessels registered to the UK flag; and
- the Agency's target setting processes and its performance against targets.

9 We visited six of the Agency's 20 marine offices and sub-offices, selected on the basis of size, type of workload and geographical location. The offices were: Southampton, Orpington, Dover, Tyne, Glasgow and Aberdeen. At the marine offices, we assessed whether the offices:

- inspect enough UK registered vessels and whether they target the riskiest vessels for inspection;
- had complete, reliable and timely information about ship arrivals and departures; and
- ensure that surveyors' work covers the right issues in sufficient detail.

10 We examined:

- the information received from port authorities;
- how marine offices select vessels for inspection; and
- the marine office's performance against its targets.

Structured interviews with surveyors at six of the Agency's Marine offices

11 We conducted interviews with twenty seven surveyors at marine offices in Dover, Orpington, Southampton, Tyne, Glasgow and Aberdeen. These covered their views on targeting, workload, prioritisation, training, IT systems and quality, and the impact of growth of the merchant fleet in these areas.

Census survey of the Agency's surveyors in charge based at Marine Offices around the UK

12 We secured questionnaire returns from each of the Agency's surveyors-in-charge at marine offices. These covered the same areas as interviews at the offices visited, giving their views for their office as a whole.

Electronic survey of ships' masters

13 To gauge the views of ships' masters about the effectiveness of surveys and inspections carried out by the Agency and classification societies, we carried out a web and electronic mail based survey of ships' masters serving on UK registered merchant ships over 100 gross tonnage. With the help of the UK ship officers' union Nautilus, we sent an email containing a web link to our survey to 1,400 UK masters; and, to ensure that we surveyed the views of non-UK masters as well as UK masters, the Agency circulated an email, containing a web link to our survey and an electronic copy of the questionnaire, to shipping companies who had vessels registered to the UK flag to forward to the masters serving on their UK registered ships.

14 The questionnaire used the same questions as those used in our survey of ships' officers for the Comptroller and Auditor General's 2001 report. This helped us to establish the latest picture and to compare the results of our survey with that carried out for the 2001 report. There were key differences between our survey and that carried out for the 2001 report:

- firstly, we surveyed serving masters only and not other ship and engineering officers. We did this to avoid responses from officers who had experienced the same survey and to focus the questionnaire on the senior ship officer;
- secondly, the coverage of our survey included non-UK as well as UK ships' masters; and
- thirdly, we used an electronic survey, rather than a postal survey, to take advantage of the modern computer technology available on many merchant ships and to help avoid the problem of masters being unable to respond because they were at sea.

15 The full results are available on the NAO website at www.nao.org.uk.

Engagement with ship owners and operators

16 We held a focus group with the UK Chamber of Shipping attended by four representatives from the shipping industry, and conducted telephone interviews with representatives from eight shipping owners and operators. Between them the companies represented by these individuals – or the groups of which they form part – own or manage 234 UK registered vessels representing nearly a quarter of the UK merchant fleet. They also own or manage 1,026 vessels registered with other flag states.

Focus group participants

Coastal Bulk Shipping Ltd	William Everard Consulting Ltd
P&O Ferries	Sealion Shipping Limited
UK Chamber of Shipping	

Telephone interviews

Evergreen Marine UK	Zodiac Maritime
Scotline Limited	British Marine PLC
CMA/CGM	Carnival
Stena Line	Maersk Marine Services

Consulting key stakeholders in the shipping industry

17 We wrote to seek evidence from a range of key stakeholders in the shipping industry. Those who provided evidence to our study included: Lloyd's Register, the ships' officers' union Nautilus and UK Major Ports Group.

18 We met with the Marine Accident Investigation Branch, the UK's Permanent Representative to the International Maritime Organization (IMO), and the IMO secretariat.

Expert panel

19 We consulted a panel of experts on our study proposal and draft report. The panel members were:

- Professor Kevin Cullinane
Director
Transport Research Institute
Napier University
- Dr Nik Winchester
Lecturer in Management
Public Leadership and Social Enterprise
Research Unit
Open University Business School
- Professor Peter Marlow
Head of Logistics and Operations Management
Cardiff Business School

APPENDIX THREE

Comparisons with selected flags

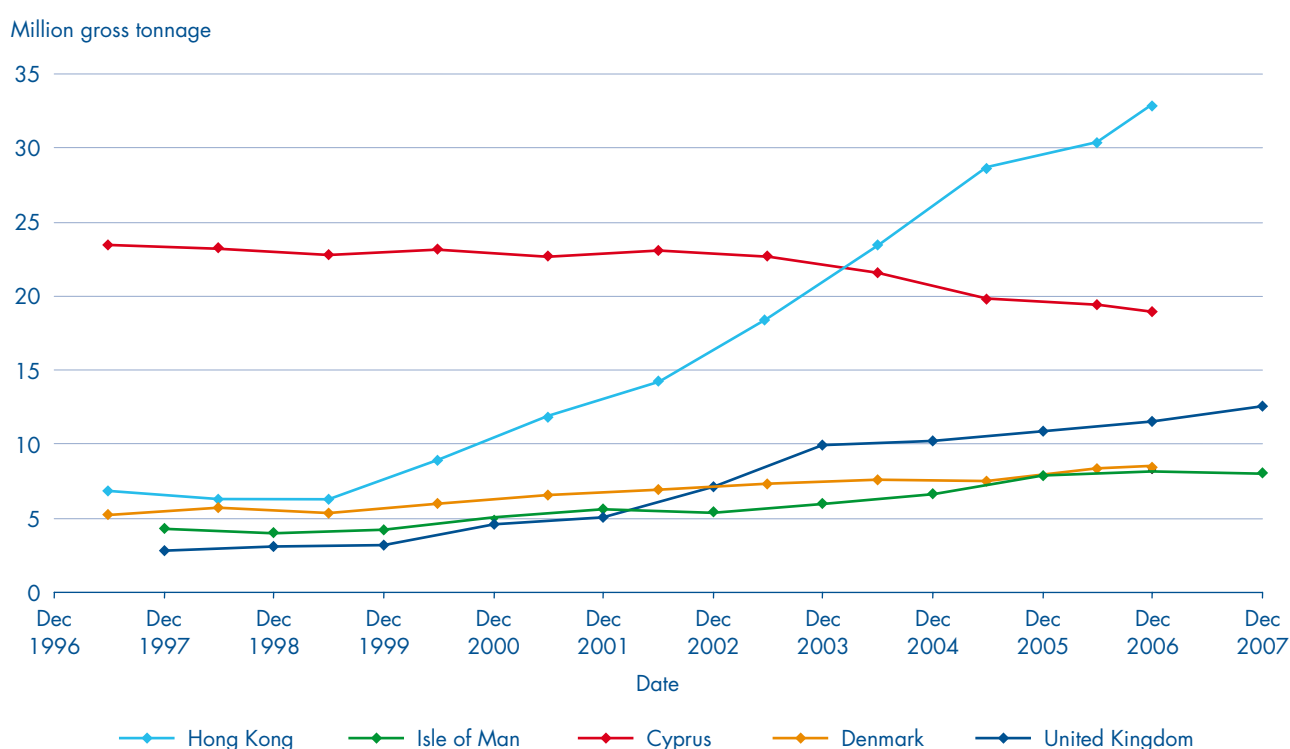
1 The main report compares the United Kingdom flag with the world fleet as a whole. This allows conclusions which are not affected by the movements of non-UK vessels between flags over time. But the performance of the UK against other specific flags is also of interest. This appendix compares the United Kingdom with five other flags:

- Hong Kong – a high growth flag with a large fleet
- Isle of Man – a red ensign flag which has experienced growth similar to the UK
- Denmark – an EU flag which has shown moderate growth and has a tonnage tax regime subject to the same EU rules as the UK

- Cyprus – a large flag which has experienced some decline but has shown some improvement in quality

Figure 15 shows the development of these flags over the past decade. It demonstrates that UK flag growth, while significant, has not matched that of Hong Kong which has benefited from the growth of far eastern economies and their international trading. The experience of Cyprus, however, shows that an initially strong position does not guarantee a share of world fleet growth so the UK has done well to improve its position in a competitive international market.

15 Merchant fleet growth for selected flags 1997-2007 (trading vessels over 100 gross tonnage)

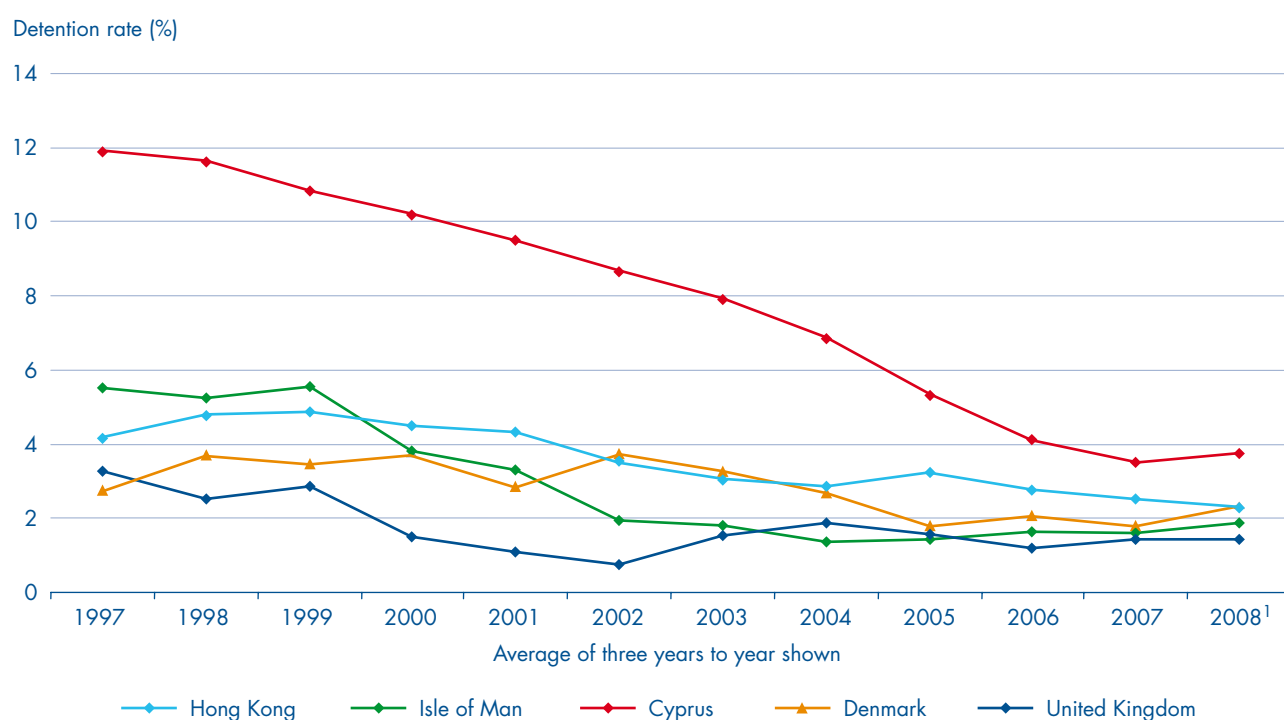


Source: Department for Transport Maritime Statistics

2 The quality trends of these flags can be illustrated by their detention and deficiency records when subject to Port State Control inspection. **Figure 16** shows that the detention rate for UK flagged vessels in the Paris MoU area was the second lowest of the five selected fleets in the three years to 1996, and the lowest in the three years to 2008. Over the same period the other three fleets, and especially the Cypriot fleet, have reduced their detention rates to below four percent of inspections. In the Tokyo MoU area the pattern is similar (**Figure 17 overleaf**), but with an increase in the detention rate for Isle of Man vessels between 2001 and 2005.

3 **Figures 18 and 19 on pages 38 and 39** illustrate deficiency rates for the selected flags. In the Paris MoU area the records of all but the Cypriot fleet have followed similar paths over the past decade, with a phase of increases followed by reductions and then another increase in the last two to three years. In contrast to the detention record, however, the performance of the UK fleet has gone from being the best of this group to the worst. The deficiency rate of the Cypriot registered fleet has been consistently higher than the other four, but its performance has improved, narrowing the gap with these competitors. In the Tokyo MoU area the UK flagged fleet has consistently had the lowest deficiency rate, though deficiency rates across the selected fleets generally rose between 1997 and 2003. Thereafter the deficiency rates of the United Kingdom, Denmark and Hong Kong have remained stable, whereas those for Cyprus and the Isle of Man have fallen giving some convergence overall.

16 Detention rates 1997-2008 – Paris MoU three year rolling average

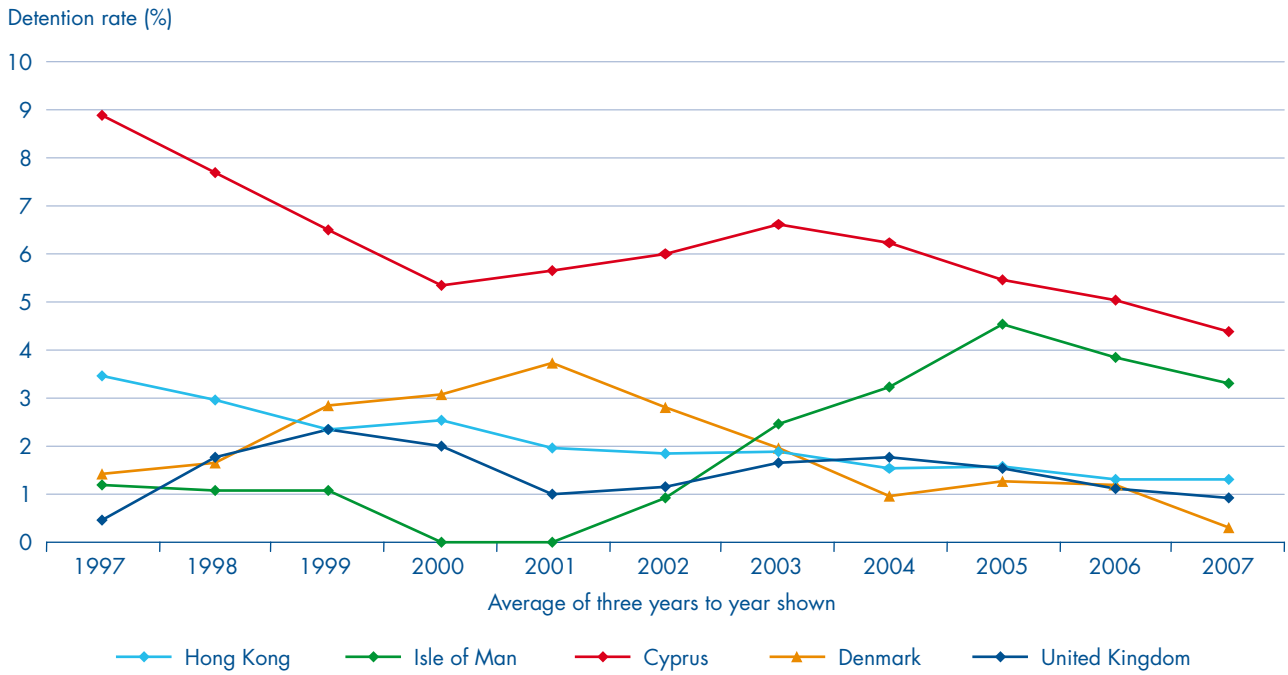


Source: Paris MoU Annual Reports 1995-2007 and Paris MoU data extract

NOTE

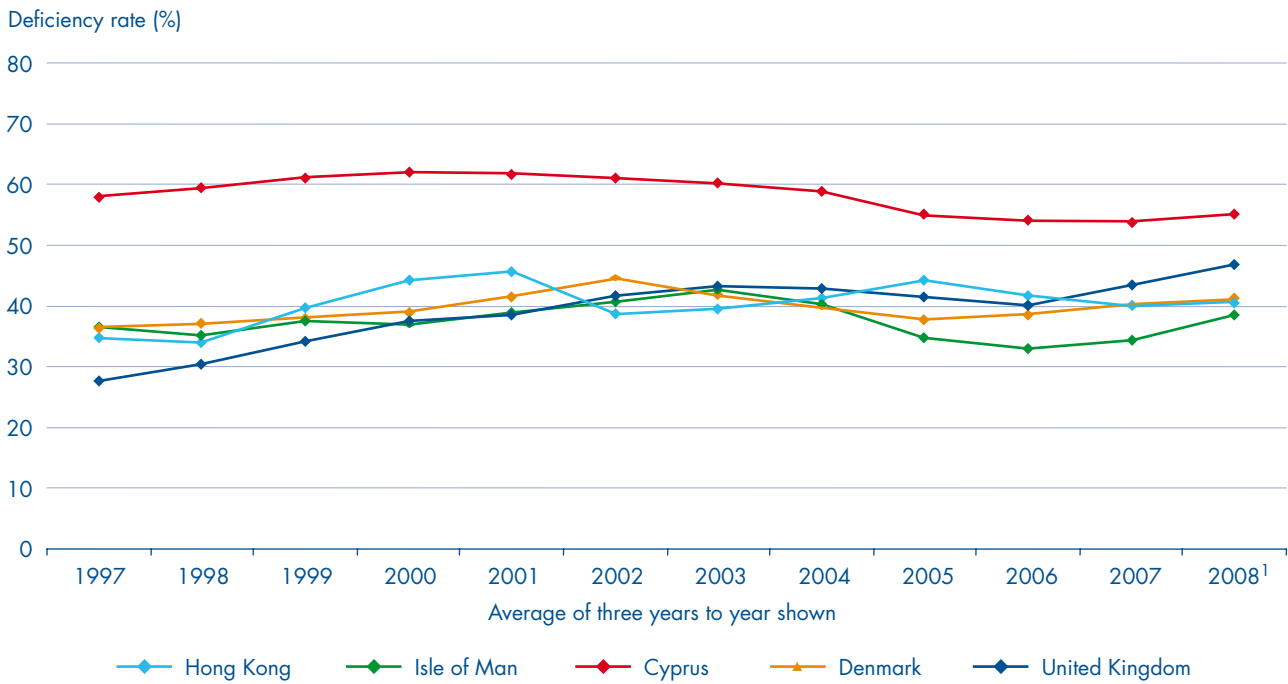
¹ Figures for 2008 are for the year to the end of July.

17 Detention rates – 1997-2007 – Tokyo MoU three year rolling average



Source: Tokyo MoU Annual Reports 1995-2007

18 Deficiency rates – 1997-2008 – Paris MoU three year rolling average

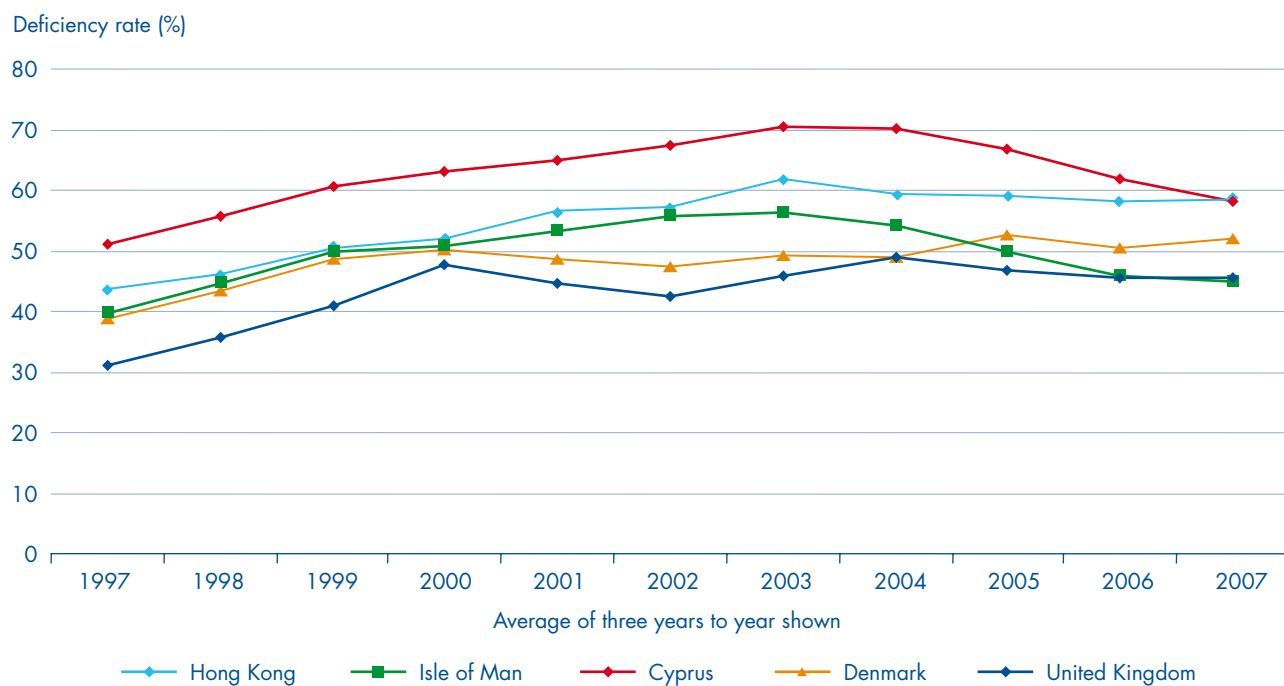


Source: Paris MoU Annual Reports 1995-2007 and Paris MoU data extract

NOTE

¹ Figures for 2008 are for the year to the end of July.

19 Deficiency rates – 1997-2007 – Tokyo MoU three year rolling average



Source: Tokyo MoU Annual Reports 1995-2007

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