

# Effective incentives.

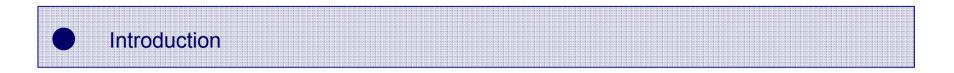
# The use of sanctions and rewards in the public sector

A presentation to the Strategy Unit January 2009



Audit.Tax.Consulting.Corporate Finance.





### Our approach

Insights from the economics of incentives

### Key findings

### Purpose of this presentation

- The NAO conducted a good governance study into the use of rewards and sanctions in the public sector, supported by Deloitte.
- This presentation is to share our findings into the use and effectiveness of reward and sanction mechanisms, and how these can best be applied to PSA delivery chains
  - We will also suggest a potential application of our findings to analysing delivery chains, for example in the context of Value for Money studies

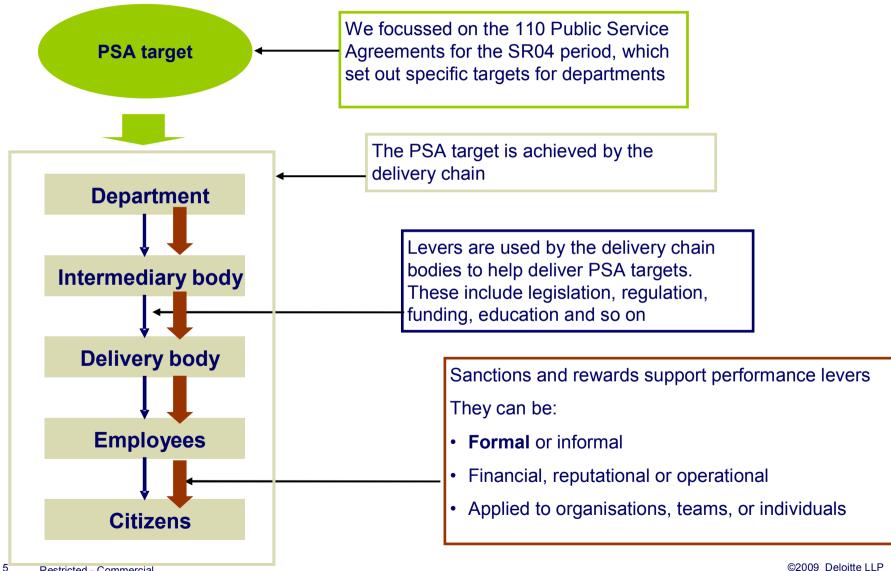
### Context and aims of our study

- The public sector uses a wide variety of performance levers to support the delivery of its objectives. These include legislation, funding, targets, regulation, inspection and internal performance management
- Some of these levers are supported by deliberately designed reward and sanction mechanisms
  - There is a perception that S/R mechanisms are under-utilised in the public sector
  - But there is currently no systematic review of sanctions and rewards across the public sector, or of what makes a S/R mechanism effective

### Our study aimed to:

- identify, classify and map alternative S/R mechanisms
- assess the evidence on the effectiveness of different S/R mechanisms in different delivery chain contexts; and
- draw out the key lessons for PSA owners in applying different S/R mechanisms to PSA delivery chains

### Scope of our study



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### Formal and informal S/R mechanisms

Examples of performance levers	Examples of formal S/R mechanisms to support the performance lever	Examples of levers with informal incentive effects
Legislation	Local transport authorities entitled to establish statutory Quality Partnership Schemes with bus operators to require them to provide services of minimum standard to ensure contract renewal.	The 1995 Environment Act requires LAs to assess air quality. There are no formal sanctions if pollution is excessive, but the area will be designated an Air Quality Management Area and an action plan has to be drawn up.
Inspection	Comprehensive Performance Assessment of LAs: publication of results and relative performance; degree of intervention/inspection linked to CPA score.	Publication of results of Departmental Capability Reviews.
Targets	Publishing of school performance against the PSA target for 5 A*-C GCSE grades.	Efficiency targets for LAs following the Gershon Review
Funding	Incapacity benefit recipients moving into work receive "return to work" credit.	Central Government Departments are allocated funding dependent upon their performance in the two previous years, but the link between performance and funding levels is not made explicit.
Education/information	Train Operating Companies required to routinely report on their punctuality and reliability.	Drink-driving campaign. Independent Financial Advisor accreditation and listing on FSA website.

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### Our approach



Desk-based research of publicly availably studies on the use and effectiveness of S/R mechanisms in the:

- Academic literature
- Public policy literature
- Management literature

## Both UK and international literature reviewed

Over 100 papers reviewed

Review of the responses to a NAO questionnaire on S/R mechanisms, sent to all SRO4 PSA owners

The questionnaire covered:

- The existence and types of S/R mechanisms in the delivery chain
- How the mechanisms are designed, measured, applied and reviewed

145 surveys sent out; 91 responses (63%) Structured interviews with PSA owners and key delivery officials for six PSA delivery chains:

- Housing planning system
- Air quality
- Homelessness
- Educational attainment
- Drug harm
- Rural development

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### Economics of incentives (1): general case

#### **BASIC CASE**

Agent's output depends on effort and random factors.

If agent risk averse, optimal contract is fixed payment plus marginal payment related to output

Optimal balance depends on:

- link from effort to output
- measurement accuracy
- agent's risk tolerance
- agent's responsiveness to incentives

#### **MULTIPLE TASKS**

- Link incentives to all tasks/overall success
- If risk of sabotage, efficient reward is smaller

#### **INTERTEMPORAL ISSUES**

- Incentives for agents to under-perform early on
- But offset by career concerns
- Financial incentives more important for older agents

#### SUBJECTIVE PERFORMANCE ASSESSMENT

- Measurement difficulties mean "relational" incentive contracts often preferred to explicit contracts
- Former can be based on subjective assessment

#### EMPLOYEE SELECTION EFFECTS

• Incentives impact through selection effects, as well as by inducing desired level of (unobservable) effort

### Economics of incentives (2): public sector

MULTIPLE PRINCIPALS, CONFLICTING OBJECTIVES

- Inevitable in public sector
- Efficiency and equity goals

MULTIPLE TASKS, OVERLAPPING ROLES

- What are the components of a "good education"?
- Lack of role clarity: who is responsible for what?

MEASUREMENT PROBLEMS AND TEAMS

- Many public sector outcomes hard to measures
- Combined with multiple tasks means reliance on team/organisational performance

INTRINSIC MOTIVATION, RISK AVERSION AND SELECTION EFFECTS

- sharper incentives in private sector, therefore more risk averse people in public sector
- Matching mission preferences of P and A reduces need for high powered incentives

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Insights from the economics of incentives

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### Key findings: usage

- The responses to the questionnaires showed that a **wide variety of S/R mechanisms** are being used to support the delivery of PSA objectives
- S/R mechanisms are more commonly used
  - Where there is a contract with a private sector body
  - For PSAs focussed on service delivery, rather than influencing or cap bdg
  - At an organisational level rather than at a team or individual level
- Around 40% of PSA owners report using formal S/R mechanisms less than might be expected
  - But this sometimes reflected confusion about differences between formal and informal mechanisms
- Explicit financial incentives for employees are less common in the private sector than many believe. Few studies carefully compare private and public sectors; one found that PRP less common in the public sector, but only for non-manuals

### Key findings: effectiveness (1)

- Public sector characteristics may make S/R mechanisms more difficult to design and implement in the public sector
- However, as in the private sector, evidence shows that public sector agents do change their behaviour in response to sanctions and rewards
- This is not always in the ways intended!
  - "Strategic" behaviour is possible (teaching to the test, massaging waiting lists)
  - Small financial incentives may reduce intrinsic motivation and be counterproductive

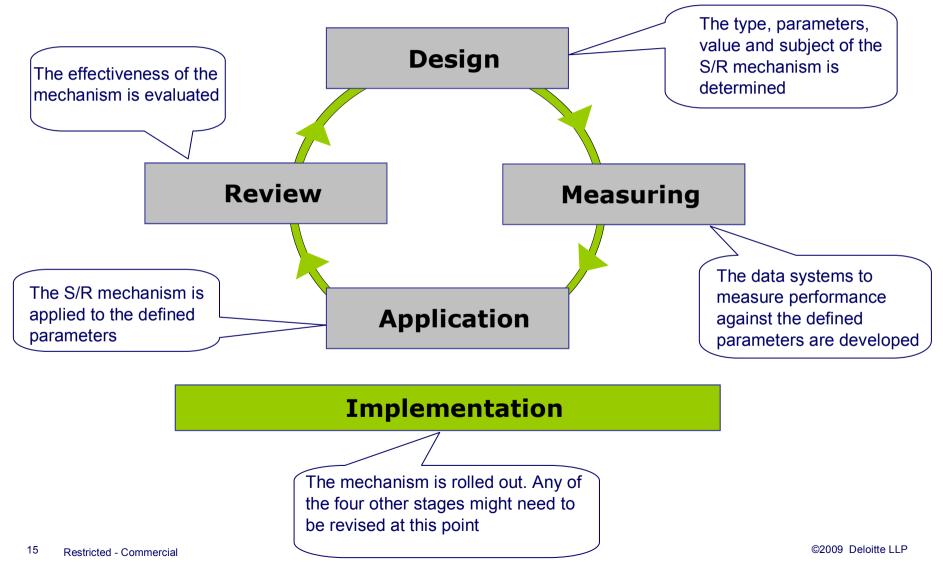
# The public sector is characterised by:

- Multiple stakeholders (service users, tax payers, politicians)
- Multiple objectives (e.g. achieving equity and efficiency)
- Intrinsic and other non-financial motivation
- More risk-averse employees (on average)

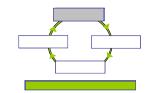
S/R mechanisms can be effective in the public sector, BUT the challenges in a public sector context must be recognised and carefully taken into account

## Key findings: effectiveness (2)

Our 10 key findings on effectiveness can be examined in the context of the five life cycle stages of a system of sanctions and rewards



### Key findings: 10 lessons on effectiveness (1)



- High intensity schemes are where a large proportion of compensation depends on performance
- These are less appropriate where:
  - Agents are very risk averse
  - Outcomes are outside agents' control
  - Outcomes, inputs and outputs cannot be easily measured

2. There is still evidence of high intensity S/R mechanisms working

1. High intensity S/R

mechanisms tend to be

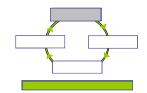
less appropriate in the public sector

- E.g. more draconian sanctions applied to waiting lists in English hospitals had a bigger impact than those applied in Scotland
- One detailed study found that other dimensions of hospital treatment were not adversely affected by A&E wait-time targets

3. It is important to understand the motivations of agents

- There may be a mixture of motivations present in public sector workers – intrinsic and self-interested
- Schemes aimed only at self-interest may weaken intrinsic motivation, so S/R mechanisms should aim to incentivise individuals of both types

## Key findings: 10 lessons on effectiveness (2)



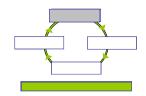
4. Agents should have control over what the S/R mechanism incentivises

- Outcomes should be adjusted where possible for sources of variation (e.g. Contextualised Value-Added measure of school performance)
- If the agent has little control over outcomes, S/R mechanisms could alternatively incentivise outputs or inputs if these are correlated to outcomes

5. The choice of output or performance measure is crucial

- The wrong choice can lead to strategic behaviour
- A successful S/R measure:
  - · Should try to capture all aspects of overall outcomes
  - May combine subjective reviews with objective performance measures if outcomes are hard to measure
  - May measure inputs or processes if these are correlated to outcomes

## Key findings: 10 lessons on effectiveness (3)



6. Team-based S/R mechanisms can be very effective

- Team-based schemes can maintain the collaborative ethos of the public sector
- Free-riding is an issue, but can be mitigated by small teams and peer pressure

7. The value/consequence of the sanction or reward must be high enough

- We found examples where the size of the S/R mechanism was not sufficient to have a real impact
- There may be a trade-off between value of reward/sanction and affordability of the scheme

### Key findings: 10 lessons on effectiveness (4)

8. Effective data systems are very important

- Effective systems are needed to collect and interpret data so that performance can be measured
- This allows the performance data attached to the S/R mechanism to be robust and timely

9. Expertise from the private sector could be helpful for contractually based mechanisms

10. The mechanism should be phased in over time and regularly reviewed

- Private sector legal and procurement expertise is commonly used in designing contracts
- Private sector expertise can also be helpful in later stages, when measuring and applying the contract

#### Phasing in a mechanism allows

- design flaws to be addressed
- Robust data systems to be developed
- · Buy-in from stakeholders

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