UNITED KINGDOM
DEBT MANAGEMENT OFFICE

Issuance of ultra-long gilt instruments
Response to Consultation

16 March 2005

Introduction and summary of conclusions

1. At the request of the Chancellor of the Exchequer, the DMO issued a consultation document on 2 December 2004 seeking views on whether HM Government should issue:

- Ultra-long (circa 50-year) conventional and index-linked gilts; and/or
- Ultra-long (circa 50-year) conventional and index-linked annuity type gilts.

2. The deadline for comments was 21 January 2005. The DMO received 53 responses from the organisations and individuals listed in Annex A. The DMO would like to express its gratitude to all the stakeholders who responded to the consultation. Stakeholder input is considered very seriously by the DMO and plays a crucial role in informing the formulation of policy advice to Treasury Ministers and subsequent decisions on gilt issuance. The DMO has an open-door policy and encourages all stakeholders to approach it and to submit information or recommendations that they believe may contribute to the continuous development of an efficient and liquid gilt market.

3. On the basis of the feedback received, the DMO and HMT made recommendations to Treasury Ministers which have been accepted and incorporated into the DMO financing remit for 2005-06, published today in the Debt and Reserves Management Report (DRMR) 2005-06. The DRMR is available on the DMO website at www.dmo.gov.uk/remit/drmr0506.pdf

4. The DMO is also publishing today a third edition of its paper "Formulae for calculating gilt prices from yields", to reflect the introduction of index-linked gilts with a three-month indexation lag; this is available on the DMO website at www.dmo.gov.uk/gilts/public/technical/yldeqns.pdf

Main conclusions – incorporated into the DMO remit for 2005-06

- From 2005-06, the DMO may issue conventional and index-linked gilts with maturities of up to approximately 50-years;

- Ultra-long conventional gilts may be issued from the first quarter of 2005-06 but new index-linked gilts with a three-month lag will not be issued before the second quarter;

- Decisions on specific maturities for the total issuance in any one quarter will be announced at the end of the preceding quarter, in the regular quarterly announcement on gilt issuance plans; and

- The DMO will **not** issue conventional or index-linked annuity type gilts in 2005-06 or in the near future.

The level of response

5. The DMO received 53 written responses to the consultation document (see list in Annex A). As trade associations sent some collective responses, this implies that feedback was received from an even larger number of stakeholders. In addition, the DMO received oral comments and had exchanges of views with other issuers who are either actively issuing ultra-long products or are considering doing so.

6. Respondents to the consultation included all Gilt-edged Market Makers (GEMMs) and a number of asset managers as well as trustees, trade associations, the Financial Services Authority (FSA), management consultants, academics, independent experts and members of the public.

7. Overall, the responses to the consultation confirm the findings of the informal consultation and analysis conducted by the DMO in the spring and summer of 2004 that led to the launch of the formal consultation at the time of the 2004 Pre-Budget Report (PBR), i.e. that there is significant potential demand for ultra-long gilts.

Main themes covered in the responses

a) Market interest in the issuance of ultra-long gilts

8. There was a clear consensus among respondents that there is demand for the issuance of ultra-long gilts in conventional and index-linked form and virtually all respondents were positive about the scale of ongoing demand. There was a hint of caution from one respondent who advised that the scale of demand might tail off for maturities beyond 2038.

9. When assessing the outcome of the consultation, the DMO has taken into account the fact that a positive bias was to be expected in the responses received, because those stakeholders that did not have an interest in the issuance of ultra-long gilts had perhaps less incentive to respond than those who did. The DMO therefore assessed not only the content of the responses but also the breadth of the constituency from which they originated.

10. All GEMMs were supportive of the proposal that the DMO issue ultra-long gilts. A similar almost unanimous view was expressed at the annual consultation meetings with GEMMs (20 January 2005), London-based end-investors (20 January 2005) and Scottish investors (24 January 2005).

- **The DMO remit for 2005-06 explicitly provides for the issuance of gilts (both conventional and index-linked) with maturities of up to approximately 50 years.**

b) Market views on the scale of demand and the recommended size of issuance in 2005-06

11. While most respondents thought that demand for ultra-long gilts would be significant and sustainable, views diverged on the amounts this would represent.

12. Few respondents provided quantitative estimates of the desirable stock of ultra-long gilts. Those who did mentioned figures ranging from a few billion pounds to ‘tens of billions of pounds’ and even for some stakeholders in excess of £100bn. Several stakeholders based their estimates of potential demand for ultra-long gilts on their estimates of the proportion of pension fund assets that could be re-allocated towards ultra-long bonds if those were available (£700bn was often quoted in this respect). While re-allocation of assets towards bonds was a common theme in responses, there was no homogeneity of views as to the magnitude or pace of such re-allocation, nor

on the amounts that may be re-allocated specifically towards gilts and towards ultra-long bonds.

13. Some investors did not provide an aggregate estimate of demand for ultra-long gilts but gave an indication of their own demand. These generally hinted at smaller numbers overall. One fund provided a figure of £50 million for index-linked gilts and £20 million for conventional gilts and another institution indicated that their own demand would initially be “millions rather than billions”.

14. As regards the size of supply of ultra-long conventional and index-linked gilts advised for 2005-06, again the responses were fairly wide ranging. GEMMs’ advice ranged from £5 billion to £30 billion (the latter figure encompassing index-linked issuance at all maturities). Investors’ suggestions also ranged between £5 and £30 billion. Several respondents suggested gradually increasing issuance from low initial amounts, with a view to gauging market demand, while others argued in favour of substantial issuance from the outset, with a view to encouraging liquidity and ensuring sufficient supply of the new instruments to meet investors’ needs effectively.

- **Ultra-long issuance is included within the DMO’s remit as part of long conventional and index-linked gilt issuance – the precise composition of ultra-long issuance within these totals will be determined following the usual quarterly consultations with the market.**

c) Market views on the sequence of issuance

15. Ultra-long index-linked gilts were recognised by almost all respondents that expressed a view on this point as having better asset/liability matching properties than conventional gilts, but the number of calls for conventional gilts matched those for index-linked. Many of those who recommended ultra-long index-linked gilts as the preferred new instrument (or the one for which there would be most potential demand) advised that conventional gilts should nevertheless be issued first. A number of reasons were cited for this, including difficulties of pricing an ultra-long index-linked gilt in the absence of a nominal curve at ultra-long maturities. Furthermore, it was noted that without comparable conventional maturities, break-even inflation rate (BEIR) data would not be available (BEIRs were separately mentioned as an increasingly important means of asset valuation). Such factors were seen as being likely to result in poor liquidity if an ultra-long index-linked gilt was issued in isolation. In summary, there was a strong message from the consultation that the DMO should issue **both** forms of gilts.

16. In terms of sequencing, other arguments emerged for issuing conventional gilts ahead of new three-month lag index-linked gilts. Aside from the points mentioned above, some respondents also mentioned IT systems issues.

17. One important element of information to come out of the consultation was the desire expressed by a majority of stakeholders that any new ultra-long gilt should be included in the key indices tracked by asset managers (FTSE indices, iBoxx indices, and those provided by individual investment banks etc.). Taking this feedback into account, the DMO has therefore concluded that it should not issue new three-month lag index-linked gilts before the second quarter of the 2005-06 financial year in order to allow sufficient time for all relevant indices to be able to handle the new bonds. FTSE has informed the DMO that the new ultra-long gilts will appear in its existing gilt indices.

- **The DMO may issue ultra-long conventional gilts from Q1 2005-06 and index-linked gilts with a three-month indexation lag from Q2 2005-06.**

d) Market views on the preferable maturity of issuance

18. While the consultation mentioned ultra-longs as being gilts with a maturity of up to approximately 50-years, respondents were of course free to indicate at which maturities they considered demand to be strongest. There was no clear consensus that 50-years was the maturity of choice. In fact, views were fairly equally divided among respondents as to the merits of 40-year and 50-year maturities.

19. Of the GEMM respondents only three opted for a 50-year in an unqualified way. Others who recommended that the DMO issue at 50-years also said it should "backfill" the curve later. More pointed to the need to issue both 40- and 50-years (and also maturities in between). Two GEMMs favoured a 40-year maturity initially and one recommended issuing at 50-year for conventional and 40-year for index-linked issues.

20. A recurrent theme was the need to complete the yield curve and some concerns were expressed at the prospect of a gap between 2038 (the maturity of the longest currently existing gilt) and a new 50-year maturity – some respondents suggested an incremental approach to extending the curve gradually towards 50-year maturities.

21. Investors/pension industry participants' views were similarly mixed. The GEMMs' concerns about large gaps in the yield curve were echoed by some investors. One collective response said that ideally the gap between maturities should be no more than 5-years, but noted that this objective may take some time to achieve. It concluded that issuing a 50-year first might be the most effective way of addressing the shortage of duration (and assisting the swaps market).

22. Other such respondents advised that the DMO launch 40-, 45- and 50-year (conventional and index-linked) gilts, whilst some recommended that the DMO focus on the range between 40 and 50 years. One investment firm said that issuing a 50-year straight away might cause problems for active investors tracking indices (i.e. an isolated bond at one end of the FTSE Actuaries index would drag the whole index duration longer); and recommended the DMO

launch a 40-year then extend the curve longer. Others said that the DMO should issue up to and including 50 years.

23. Some respondents were more positive pointing out that the greatest levels of demand from pension funds were at the longest maturities being considered. While 50 years was mentioned by almost all those respondents, there were also mentions of maturities beyond that and the longest maturity recommended (in an isolated case) was 99 years.

- **The DMO will decide the precise maturities to be issued, and the sequence, following the regular quarterly consultation meetings with the market.**

e) Market views on annuity-type gilts

24. Another type of instrument upon which the DMO consulted was fixed-term annuity gilts. The feedback on this question was very clear. Only a handful of respondents (5 out of 53) explicitly recommended annuities, with widespread concerns being expressed by most others about the potential illiquidity of such instruments. It was also said that annuities would be of interest to particular individual investors rather than of more generic widespread interest. The thrust of these responses was that the comparative advantage of government was to provide standardised underlying gilt instruments and allow the financial services industry to use them to construct any synthetic cash flow structure to match individual investors' requirements.

25. Those advocating annuities were generally in the upper echelons of the investment decision-making chain, i.e. trustees, consultants and policy advisers in the pension industry. The DMO also received expressions of interest for this proposal from other issuers, who thought there could be benefits in developing a market for fixed-income assets with alternative cash flow structures.

26. In contrast, and with only one exception, GEMMs and asset managers, who are further down the investment decision-making chain, saw little merit in changing the usual market convention for structuring cash flows, i.e. bullet bonds.

27. Independently of the merits of one format or another in principle, the DMO does not believe that it would be sensible to issue instruments that its direct counterparties would currently be reluctant to buy. The DMO would only have recommended the issuance of fixed-term annuities if both (i) a large majority of respondents had supported such a move and (ii) it was confident that respondents reflected the view of a critical mass of market participants. The first condition in particular is not fulfilled.

- **The DMO will not issue annuity type gilts in 2005-06 or in the near future.**

f) Other issues raised in the consultation

28. Issuance method: most respondents recommended the use of auctions for ultra-long gilts arguing that the current system works well and is predictable. A minority, however, pointed to potential gains in risk management and control over pricing and distribution offered by syndication – at least for an initial issue. Some investors echoed these sentiments.

- **Auctions remain the preferred means of issuance for all gilts. However, the DMO, with the agreement of HM Treasury, reserves the right to issue ultra-long gilts initially by syndicated offerings. Syndicated offerings would only take place in cases where HM Treasury was satisfied that this method of issuance would better meet the Government's debt management policy objective of minimising long-term costs, whilst taking account of risk.**

29. Zero ex-dividend: feedback on the potential move to zero ex-dividend period and settlement only in CREST for new instruments was sporadic and views on this issue were not particularly strongly expressed. Some saw it as an improvement in principle, but concerns were expressed about the potential impact on retail access to new gilts. Issues concerning potential fragmentation and liquidity as well as settlement were also raised.

- **The DMO has decided not to proceed with the introduction of zero-ex-dividend for new three-month lag index-linked gilts at this stage. However, the DMO may review the policy in relation to the gilts market as a whole in the future.**

30. GEMM obligations: the unequivocal response – both from GEMMs and investors - to the consultation was that GEMM obligations should apply to ultra-long conventional and index-linked gilts (some reservations were, however, expressed in relation to annuities).

- **In the light of the decision not to proceed with annuities the DMO has decided that existing GEMM obligations will apply to ultra-long gilts.**

31. Tax: The Inland Revenue has confirmed that the tax treatment for new ultra-long gilts and three-month lag index-linked gilts will follow exactly that for existing conventional and index-linked gilts.

32. In relation to three-month lag index-linked gilts, some issues were raised by respondents that were not within the scope of the consultation. These issues are covered in Annex B.

Conclusions

33. The outcome of the consultation suggests that there is significant and probably sustainable demand for ultra-long bonds, in both conventional and index-linked formats, and that this demand is currently not met by sufficient supply. The DMO believes that it may be able to successfully satisfy some of that demand through the issuance of ultra-long gilts that have a duration above currently existing bonds, and that it is likely to be able to capture a premium in doing so. The DMO therefore believes that issuing ultra-long gilts would be consistent with its objective of minimising cost over the long term, while taking account of risk.

34. The DMO has therefore recommended the addition to its remit of the possibility of issuing ultra-long gilts in both conventional and index-linked formats. HM Treasury has endorsed this advice, which has met with the approval of Treasury Ministers.

35. The DMO intends to issue a conventional ultra-long gilt before it would issue an ultra-long index-linked gilt, as requested by stakeholders, with a view to facilitating pricing of the latter. For the same reason, the DMO would normally expect to issue any ultra-long index-linked gilt only at maturities similar to those of existing conventional gilts.

36. The DMO has decided to postpone launching a new index-linked gilt until Q2 of 2005-06 at the earliest, in order to ensure that sufficient time is given for market participants and the relevant index providers to be capable of accommodating the new instruments. However, the DMO could issue a conventional ultra-long gilt in Q1 of 2005-06.

37. Any decision to launch such new gilts at any particular date will be taken in accordance with the existing debt management framework. The auction calendar for 2005-06 is being published today in the Debt and Reserves Management Report 2005-06. Decisions on the specific gilts to be issued in April-June 2005 will be announced by the DMO on 31 March 2005, taking into account views expressed by GEMMs and gilt market investors in the quarterly consultation meetings (scheduled for 21 March 2005).

38. Responding to the demand expressed by stakeholders that benchmarks are issued across the whole maturity spectrum without excessively large maturity gaps between them, the DMO sees merit in establishing over time both 40-year and 50-year benchmark gilts, market conditions allowing.

Summary of responses to individual questions

The summary of responses provided below aims at reflecting the views conveyed by stakeholders participating in the consultation and does not necessarily reflect the DMO's own views.

A. Potential demand for new instruments in 2005-06

a) What is the potential scale of demand for ultra-long (circa 50-year) conventional or index-linked gilts?

A reallocation of pension fund investments from equities to bonds was highlighted as an ongoing and structural trend that is expected to continue and to underpin demand for ultra-long gilts. Total pension fund investments of up to £700 billion were cited by a number of respondents - so reallocation of even a small percentage of this would be substantial. Specific figures mentioned were: £40-60 billion, £70-140 billion, circa £100 billion in total, £15-20 billion per year, £10 billion per year, £35 billion in next three years then £6-12 billion per year, £120 billion by 2010 and £25-30 billion per year for the next few years.

There were isolated warnings about the danger of overestimating demand from some pension funds, the current shape of the curve being likely to inhibit some demand.

b) If the DMO were to extend the maturity range of gilts it issues, for which maturities would there be most potential demand?

Recommendations for issuance were fairly evenly divided between 40 and 50 year bonds, as was advice on whether the DMO should move out incrementally from 2038 (the maturity of the longest conventional gilt currently in issue) toward 50-year or issue at 50-year and then "backfill" the curve. There was, however, a fairly general view that it would be undesirable to have a very large gap between 2038 and the maturity of a new 50-year gilt on an ongoing basis.

There were isolated calls for 55-60 year and 99 year bonds.

c) What is the potential demand for gilts structured in annuity format?

Feedback here was generally very cautious. Some respondents suggested that demand was likely to be limited and certainly lower than for bullet bonds (which could be used instead to construct synthetic cash flow structures meeting investors' requirements). Some respondents, while acknowledging the potential interest of an annuity structure, cited concerns over potential illiquidity as a drawback. Those who suggested that there could be significant long-term demand advised that such demand would be driven by specific investor circumstances, the timing of which was hard to gauge. Most of those who did see appeal in the instrument in principle advised issuing ultra-long bullet bonds first.

There were also suggestions that bonds structured in fixed-term annuity format may be particularly well suited to retail investors.

*d) **How sustainable would demand be for ultra-long and annuity format gilts over time?***

See (a) above – the general thrust was that such demand would be ongoing and increasing – in part reflecting demographic trends and changes in risk management practices.

*e) **In the event that it was decided to issue only a single form of new instrument in 2005-06, which of the instruments outlined above is of most potential interest?***

Index-linked gilts were widely seen as the single most attractive new instrument but there was also strong support for ultra-long conventional gilts. Even amongst those who preferred index-linked there was also a strong view that an ultra-long conventional gilt should be issued first, to help pricing and liquidity and to facilitate subsequent break-even inflation rate trades in the new index-linked instrument.

Only five out of fifty-three respondents cited annuities as their favoured new product.

One respondent favoured ultra-long 'longevity' bonds (even though these were outside the scope of the consultation in terms of possible issuance in 2005-06) and one respondent advocated an entirely new instrument, known as an "evergreen" bond (a bond in which a fixed percentage of the amount outstanding is repaid each year, i.e. an exponentially amortising zero coupon bond).

*f) **How much, in £ billions should the Government initially plan to supply in one financial year?***

Responses varied greatly from approximately £3 billion to a few mentions of amounts up to £25-35 billion, with most recommendations in the region of £5-15 billion.

B. Issuance procedure

*g) **If the DMO were to issue any such new instruments, should issuance take place from the outset through auctions?***

A majority of respondents preferred auctions as the standard issuance method; there were 31 references to issuance by auction and nine by alternative methods - mainly syndication (see below). Most of the GEMMs favoured auctions although some by implication rather than outright advocacy. One GEMM suggested auctions but noted a case for syndication. Again, the majority of the investors who explicitly answered this question favoured auctions.

h) Alternatively, should the DMO consider other means to distribute the bonds when first issued (or perhaps on an ongoing basis) and if so, which?

Syndicated offerings were recommended by four GEMMs, who pointed to potential gains in risk management and control over pricing and distribution offered by such a technique – at least for an initial issue. Some investors echoed these sentiments and noted that a fixed auction schedule did not fit well with the (investment) decision-making processes within pension funds. There was one call for private placements into large pension funds.

C. Instrument design

i) If the DMO were to issue ultra-long and/or annuity gilts, should such issuance take place preferably in conventional format or in index-linked format?

See also the response to question (e) above. Most replies to this question pointed to a preference for index-linked bullet bonds, but equally to a need for conventional bonds to be issued as well (and before an index-linked gilt). Some saw a mix of conventional and index-linked gilts as being important to manage limited price-indexed (LPI) liabilities. As also noted in (e) above there was very little support for gilts in an annuity format.

j) If the DMO were to issue gilts with an annuity structure (in nominal or index-linked format), should the DMO allow for these new gilts to be stripped?

There was very little support for the concept of issuing annuities at all (see (c) above), but on the assumption they were issued there was equally little enthusiasm for making them strippable. Some saw strippability as being desirable in principle but of low priority, others thought strippability would add to complexity or was irrelevant.

k) For new index-linked gilts with a three-month lag, and/or for any new gilts issued in annuity format, the DMO would be interested in views on whether such gilts should be held only in CREST. This would allow a zero ex-dividend period to be introduced for those gilts. Respondents may wish to take account of possible liquidity issues arising from the need to make payments into Cash Memorandum Accounts (CMAs).

Only 25 respondents answered this question and most of them did not express a strong opinion. Some pointed to potential advantages in moving to international best practice, and saw the move to zero ex-dividend as desirable in principle. However, concerns were expressed about potential disadvantages for retail investors unable to settle in CREST, about fragmentation and liquidity problems (if some gilts had an ex-dividend period and others did not), and about settlement mechanics.

l) If the DMO were to issue gilts in annuity format, what are stakeholders' preferences regarding the frequency of cash flows?

Feedback here was muted and views mixed with monthly, quarterly and semi-annual payment frequencies all mentioned.

m) Do recipients have any other comments or suggestions on the proposed product design in Annex B?

Very few responses were received to this question – those that were received were broadly supportive.

D. Timing for introduction of new instruments

n) If the DMO were to issue any such instruments – and gilt annuities in particular – what would be the lead times required by investors, Gilt-edged Market Makers (GEMMs) and other interested stakeholders before such issuance can realistically take place?

The general message here was for a minimum of three months although some advised six. Only a handful of responses advised as little as one month.

Where specifically mentioned the view was that ultra-long conventionals could be issued "quickly" with a period of one month being mentioned by some.

o) What are the lead times required by investors, GEMMs and other interested stakeholders before issuance of a three-month lag index-linked gilt can take place?

Although some respondents advised three-month lag index-linked gilts could be introduced quickly, it was widely felt that a period of transition was needed, (for systems and other reasons); this ranged from a matter of weeks to six months. Three months was the single most often mentioned period; with only two respondents mentioning longer periods.

E. Potential advantages / disadvantages with issuance of new instruments

p) How do respondents assess the benefits, for HM Government and for investors, of any new instrument being created?

The most often cited benefit for HM Government was the relatively low apparent cost of funding resulting from the current inverted shape of the yield curves (real and nominal). There was also some expectation that issuance might help correct yield curve inversion and that some rise in yields would be of wider benefit to the pension fund industry and, according to some *respondents, indirectly to HM Government through that channel. It was also suggested that issuing ultra-longs would help diversify HM Government's financing options. For investors the benefits were seen as the availability of sought after assets (to match liabilities and hedge risks, e.g. against long-term inflation) and the provision of greater liquidity at the longest maturities.*

q) Would the adoption of an annuity format detract from the liquidity and benchmark status of such bonds?

Respondents generally felt that annuities would be intrinsically buy-and-hold (hence illiquid) instruments – i.e. specialised and unlikely to command benchmark premia. Indeed some pointed to annuities being issued at a discount. However, some noted the opposite – that their liability matching value to purchasers was such that they would be prepared to pay a premium for their creation.

r) Would the introduction of an annuity format detract from the liquidity of standard benchmark gilts (particularly as the annuity format bonds age), or otherwise fragment the overall gilts market?

Views were divided between those who thought that introducing annuities would fragment the market and damage liquidity, and those who suggested that the impact would be limited (providing there was sufficient issuance of bullet gilts, or because they would be viewed as a separate asset class).

F. Market maker responsibilities

s) If the DMO were to issue any such instrument, should the roles and responsibilities of GEMMs be identical to those applying to other gilts?

It was widely felt that current GEMM obligations should extend to ultra-long conventional and index-linked gilts. In the event that annuities were issued (or that new gilts might be issued other than by auction) some felt that there may be a case for restricting market making responsibilities, to a) those expressing an interest in annuities and/or b) those banks involved in the selling process.

Annex A: Respondents to the consultation

ABI
ABN Amro
Association of Consulting Actuaries
Association of Corporate Treasurers
Barclays Capital
Barclays Pension Fund
BNP Paribas
Citigroup
Computershare
CRESTCo
CSFB
Deutsche Bank
Dresdner Kleinwort Wasserstein
ESPS (Hewitts)
Fidelity Investments
Finance Development Centre
Foreign & Colonial Asset Management
FSA
Goldman Sachs
Graham Bishop
Henderson Global Investors
Hermes Investment Management
Hewitt Bacon & Woodrow
HSBC
ICAP
ICI Investment Management Ltd
Insight Investment (HBOS)
Investment Management Association
JP Morgan
Julian Wiseman
Law Debenture Trust Corporation
Lehman Brothers
Lloyds/TSB (City euro Group)
Mercer Investment Consulting
Merrill Lynch
Merrill Lynch Asset Management
Mike Williams
Morgan Stanley
Morley Asset Mangement
Mr LD Hopkins
Mr THR Archer
NAPF
Professor David Blake, Andrew Cairns, Sam Cox, Paul Dawson, Kevin Dowd & Richard McMinn
Prudential M&G
Royal Bank of Canada
Royal Bank of Scotland
Standard Life
The Actuarial Profession
Threadneedle Asset Management
UBS
Watson Wyatt
Western Asset Management
Winterflood Securities Ltd

Annex B:

Issues (not covered specifically in the consultation) which were raised in connection with three-month lag index-linked gilts

- Principal repayment deflation floor: a handful of respondents suggested that index-linked gilts not having a deflation floor (as used e.g. for TIPS in the US and OATi and OAT€i in France) might inhibit interest from international investors – and that including such a provision might better follow international best practice[1]. In contrast, one respondent specifically advised against introducing a deflation floor. The DMO raised this issue in its consultation on index-linked gilt re-design in September 2001 and received little evidence that the market attached significant value to such an option then. Although a common feature in international markets, the DMO does not see a deflation floor as necessarily best practice. The DMO continues to believe that introducing a deflation floor would reduce the value to HM Treasury of having index-linked gilts in its debt portfolio by reducing their deficit smoothing properties in some circumstances and therefore has no intention to introduce such a feature in the foreseeable future.

- Market fragmentation: some concerns were expressed that the introduction of three-month lag index-linked gilts alongside existing eight month lag instruments might result in a two-tier market and damage liquidity, particularly in the eight-month lag gilts. A lack of consultation regarding the issuance of three-month lag gilts was also referred to, as was the DMO statement in its response to its 2001 consultation that it would consult on future re-design. In terms of market fragmentation and liquidity the DMO's experience suggests that liquidity in the index-linked market is influenced most directly by the amount of gross issuance itself – this is scheduled to rise to a record high in 2005-06. The DMO also believes that the move to index-linked gilts with a three-month lag should be seen as a technical change to improve the inflation protection properties of index-linked gilts rather than a new competing instrument. This rationale led the DMO to believe that it would be unnecessary to consult again on the introduction of a three-month lag (particularly given the growth and development of the international index-linked bond markets since 2002). The DMO notes that three-month lag instruments now account for approximately 75% of global government index-linked bond indices. Finally the French OATi and OAT€i programme has

[1] Existing eight-month lag index-linked gilts also do not have a deflation floor.

also demonstrated that two types of a similar instrument can exist successfully side by side.

- Limit on price quotations: one respondent noted that Annex A in the consultation document suggested that real clean prices on new index-linked gilts are to be quoted to two decimal places per £100 nominal and noted that there was no corresponding limit on existing bonds. It was suggested that the restriction should be removed. The DMO has accepted this suggestion and the new edition of its price/yield formulae paper, which is being published today, incorporates this change.

- Trades arranged for forward settlement: one respondent asked for clarification of the calculation of such trades when the exact settlement cannot be calculated at the time of dealing. The DMO believes that, although the shorter indexation lag may reduce the ability of the market to trade the three-month lag index-linked gilts for forward settlement vis-à-vis eight month lagged bonds, this situation should be no different from the other markets, which successfully employ this instrument design.