GOVERNMENT ACTUARY'S DEPARTMENT

From the Government Actuary **Trevor Llanwarne**

UNCLASSIFIED

Julian Kelly
Director, Public Spending

By email only

17 December 2013

Dear Julian

Draft Public Service Pensions (Valuations and Employer Cost Cap) Directions 2013

Thank you for your letter of 10 October 2013. You have asked me to set out my initial professional opinion on the actuarial aspects of the draft Public Service Pensions (Valuations and Employer Cost Cap) Directions 2013 (v3-0) directions (draft directions) which you attached to your letter, with particular reference to three specific questions: My views on the extent to which:

- the data, methodology and assumptions proposed meet the Government's over-riding objectives and principles;
- these draft directions are technically complete and coherent;
- any practical challenges could arise as a consequence of the directions and any suggestions for how to approach such challenges

Your letter explains that the Government's over-riding objective is for the directions to implement the Government's intended approach to; actuarial valuations of public service pension schemes; and; establishing an employer cost cap in public service pension schemes and expands on the nine principles[1] which officials have had regard to in preparing this first draft of the directions:

- completeness
- no bias[2]
- discount rate
- clarity
- consistency[3]
- cost control

[1] The last four principles; cost control, stability, sustainability and technical immunity all relate to measuring changes in the cost of the scheme against the employer cost cap
[2] The no bias principle is equivalent to "best estimate"
[3] The consistency principle covers; consistency across public service pension schemes, consistency over time and consistency in the way different assumptions are set for different schemes where different scheme workforces have different characteristics.

Finlaison House 15-17 Furnival Street London EC4A 1AB T: +44 (0)20 7211 2601 www.gov.uk/gad
Direct line: +44 (0)20 7211 2620 F: +44 (0)20 7211 2640 E: trevor.llanwarne@gad.gov.uk

GAD seeks to achieve a high standard in all our work. Please go to our website for details of the standards we apply.

- stability
- sustainability
- technical immunity[4]

Your letter of 10 October 2013 is set out in Annex A to this letter.

Before I set out my initial professional opinion, it will be helpful if I set out my understanding of the purposes for which these draft directions have been prepared and some background to the valuations of the public service pension schemes. It may also be helpful for me to note here that I appreciate that the Government, in formulating public service pension policy, will inevitably want to take into account various considerations other than those of a purely actuarial nature.

Background

(i) The two purposes – employer contribution rate and employer cost cap

For each scheme which these directions will apply to[5], I understand that the directions will be relevant to two different purposes:

1. Informing the employer contribution rate[6]. I understand the purpose of an employer contribution rate for the unfunded public service pension schemes is to ensure that:

    - the value of benefits being earned today is recognised by employers and total contributions reflect this;
    - employers pay a charge that is appropriate for public service pension schemes, just as private sector employers must pay contributions that are appropriate for funded pension schemes; and
    - today's decisions by Government and public service employers about how many people to employ, as opposed to other forms of expenditure, take into account the full future cost of employing people.

2. Setting the "employer cost cap"[7] and "measuring changes in the cost of the scheme against the employer cost cap"[8]. I understand that measuring changes in the cost of the scheme against an employer cost cap will inform the mechanism which is intended to control the cost of providing public service pensions which the Government are establishing following recommendation 12 of the Independent Public Service Pensions Commission. In particular, I understand the purpose of this mechanism is to ensure that the risks associated with pension provision are shared between employers and scheme members.

I have set out in Annex B a summary of my understanding of the main aspects of the valuation calculation approach required by these draft directions, highlighting where these

[4] The technical immunity principle means that the measurement of changes in the cost of the scheme against the employer cost cap should exclude certain effects.
[5] In general, one scheme for each of the eight workforces listed in Section 1(2) of the Public Service Pensions Act 2013.
[6] I understand these aspects of the directions differ for schemes for local government workers because the rates which employers pay are determined at local level.
[7] As defined in Section 12 of the Public Service Pensions Act 2013.
[8] As envisaged in Section 12(4)(b) of the Public Service Pensions Act 2013. In the draft directions I note that it is the "cost cap cost of the scheme" which is compared against the employer cost cap at each valuation.

differ for the two purposes described above. Annex B also indexes which parts of the draft directions I understand implement these differences.

In the remainder of this letter you will see that, where appropriate, my comments refer separately to each of these two purposes.

(ii) **Legal framework**

I set out below my understanding of the legal framework in which these valuations will formally proceed. Each scheme will have its own scheme regulations, none of which are yet in force. The scheme regulations are statutory instruments made under the powers in the Public Service Pensions Act 2013 (PSPA 2013). The PSPA 2013 requires scheme regulations to contain:

- an employer cost cap set in accordance with HM Treasury Directions
- mechanisms to be followed if the employer cost cap is breached and
- an obligation to carry out valuations in accordance with HM Treasury Directions

In addition, while the PSPA 2013 does not oblige scheme regulations to contain the employer contribution rates, they typically will (item 9 of Schedule 3 of the PSPA 2013 foreshadows but does not compel this).

The directions on which I am being asked to comment provide a framework for carrying out regular valuations within which the assumptions and methodology for the valuations must be set (including prescription of some, but not all, of the assumptions and methodology). Where the directions do not prescribe specific assumptions and methodology, schemes are able to set their own best estimates. The scheme regulations themselves may be subject to HM Treasury consent. In effect, this will amount to a de facto HM Treasury consent to the scheme's choice of assumptions and methodology (this has typically been the case in the past except for some of the schemes in devolved administrations who manage their own budgets).

The legal framework under these directions for a valuation from which the cost cap is set (termed the "preliminary valuation" in the directions) is slightly different. A key difference is that the preliminary valuations will be carried out under existing powers and not be carried out under scheme regulations made under the PSPA 2013.

(iii) **The difficulty of covering every eventuality in advance - the need for reviews and impact of professionalism**

This is the first time, since their coming into being, that the schemes have been subject to a coordinated approach to valuations all taking place at the same date. As you note in your letter, the move towards a more consistent approach to valuations is consistent with recommendation 6 of the Independent Public Service Pensions Commission's final report. I think it is important to note that this is a significant shift in approach to valuations and as such poses some new challenges. With this in mind, it will be important that the directions and the associated policy (including commitments to review) allows for the second round of valuations carried out under the directions to take on board any lessons learned from the first round of valuations carried out under the directions.

Given this move towards a more consistent approach to valuations, a natural desire, on many parts, is to avoid unnecessary discrepancies between the schemes wherever possible.

However, there is inevitably some tension between this desire and the underlying valuation principle of "best estimate". As is the case for both audit and actuarial work, best estimate involves process and professional judgement on the facts of each case (meaning each

scheme for these purposes). As with any ultimate profit figure in any audited accounts (involving best estimate elements) it is quite acceptable for two different numbers to emerge (from two different actuaries or auditors for that matter) which are fully compliant with all standards and directions i.e. which are different yet professionally certified. This is, in part, because an “estimate” is what it says - an estimate - and only hindsight will say what the precise number should be, and in part because of the number of issues where actuarial judgement is required. So without being prescriptive on every aspect of the valuations thereby almost inevitably prejudicing some of the other principles, it is not possible to cover every eventuality in advance.

Against this background, I note the intentions stated in your letter that you will keep the directions under review after they have been finalised. For reasons above, I agree that this is appropriate, essential and to be expected. It will be important to review the directions before each valuation round to ensure that they remain fit for purpose and therefore current thinking should take advantage of this future flexibility.

You state that the purpose of future reviews would be “to ensure that they continue to reflect Treasury policy, and secondly to take account of any developments that are relevant to public service pension scheme cost measurement and control”.

The review processes are likely to be important, particularly as different stakeholders may have different expectations about the objectives and potential outcomes of such reviews. For example, I believe that some areas/changes which could trigger such review processes may include:

- review of the level of the SCAPE discount rate (due in 2016)
- updates to OBR economic forecasts
- significant changes in the profile of the relevant public service workforce
- emerging demographic evidence
- any changes in policy on State Pension Age
- any developments on implementing policy on state pension provision
- updates to International Accounting Standard 19

Given the nature and length of such a list, and the new comprehensive nature of what is being done for the first time, it will be difficult enough to meet the principles purely by looking at the position for the first round of valuations carried out under the directions and there appears to be very little value in trying to pre-empt against all future eventualities at subsequent valuations now. Accordingly, I think it is inevitable that over a four year valuation cycle some events will arise such that the directions will need revising at each subsequent round of valuations.

Initial professional opinion

My initial professional opinion is that the directions will deliver results which, in the round, do meet to a significant degree the principles, with some met better than others, and, in the round, are technically coherent and complete.

However, as can be understood from the above analysis, the process being followed will have imperfections, and it will not be possible, in advance, to know which imperfections are more important than others. It is also therefore my initial professional opinion that it is impossible to meet all the principles fully and there have to be trade-offs and so, as currently framed, it would not be meaningful for me to give an answer to the first two questions in your letter. Put another way, since you have not, quite legitimately, given any sense of ranking or prioritisation of the principles I cannot give any view on how good a fit the directions are to the set of principles as a whole (and indeed, given the inevitable tension between these principles when considered together, I am not sure of the value of such an exercise).

However, as set out above, I am satisfied that the directions do, in the round, meet these principles to a significant degree.

As the directions stand I see there are five major issues (listed below) where clarity is essential if the directions are to deliver, as far as is possible, on your objectives for the preliminary valuations of the scheme. I recommend that clarity in these areas is given, either in the directions or otherwise.

<u>Issue one: does consistency or best estimate take precedence</u>

From your letter I am clear that HM Treasury want any set of assumptions to be used for a schemes' valuation arising from the directions to be best estimate assumptions. However I am not clear whether, when comparing the sets of assumptions to be used by different schemes, HM Treasury have any of the following additional objectives:

- the assumptions for any two schemes should, subject to being able to be described as best estimate, be the same (or different but such as to deliver the same valuation results as though the assumptions were the same)
- where, at the first valuations carried out under these directions, the same (or different) sets of assumptions for any two schemes are used to deliver the same results for those two schemes, this equivalence should continue into future valuations
- when presented with the available evidence base on which best estimate judgements are to be made, schemes should exercise their judgement in the same way

If you do have such additional objectives then, to avoid lengthy delays and practical inter-scheme problems, I think you will need to resolve this ambiguity. Possible approaches for resolution (in roughly decreasing order of HM Treasury involvement) include:

- prescribe all the additional assumptions necessary in the directions (which may downgrade the "no bias" principle)
- prescribe some additional assumptions in the directions but allow divergence from those directed assumptions if there is clear compelling evidence that the directed assumption would not be "best estimate"
- a mechanism to make consistency requirements known outside directions on issues where the actuary may have inadequate knowledge of key issues - e.g. workforce projections and behaviours under new benefit features
- outline a process where a deadline for submissions of proposed assumptions is set and HM Treasury respond by specifying which adjustments to assumptions HM Treasury require
- establish a process whereby such differences in assumptions are eliminated via agreement between schemes
- given that such differences do not infringe the principles, accept any differences of opinion when different schemes set "best estimates" with a formal signed certification of "a best estimate"

Each of these six approaches could be delivered in different ways and could be used in various combinations for different groups of schemes and or different assumptions. It is important to note that the impact of professionalism as discussed in the background section

of this letter means that on a matter such as ‘best estimate’ for any scheme, this is a judgement call for that scheme and that any cross public service consistency drive will therefore need HM Treasury involvement along the lines set out above.

Issue two: inconsistency consequences of timing practicalities

The time taken to complete valuations of public service pension schemes is significant. The time from the effective date (when the required membership data can start being collected) to the point of signing a final valuation report has typically been a number of years in the past. It is also often the case that valuations for different schemes take different lengths of time (for a variety of reasons e.g. varying number of employers which scheme administrators need to collect membership data from). In addition, historically, the valuations for each of the main public service schemes have not been aligned.

While the directions address this historic inconsistency by putting the valuations of all the public service pension schemes onto aligned cycles, they do not define a date by which valuation reports must be signed (rightly in my view given the variation in time that schemes need). However other parts of the directions mean that in practice the date that each scheme’s valuation report must be signed will have to fall between the effective date and implementation date (a three year window for signing reports) for each valuation cycle.

In practice this means that any two public service pension schemes could be signing their valuation reports (with the same effective dates and implementation dates) more than a year or more apart. This raises issues around consistency of valuation reports, results and assumptions between schemes where directions are not prescriptive (so a similar although different point to the first one described above) because two public service pension schemes could complete their valuations either side of an event that causes a change in assumption. Areas where this could arise include:

- the use of OBR’s forecasts of economic indicators to set the financial assumptions (OBR currently update their forecasts at least twice a year, and so if you amend the directions at each OBR forecast scheme could end up with different assumptions within the same valuation cycle)

- the direction that requires the use of the “most recent” ONS population projections of the United Kingdom (if two valuation reports fall either side of a population projection update)

- the direction that requires the use of public announcements on State Pension Age (if two valuation reports fall either side of such an announcement)

- other significant events which occur after the effective date for each round of valuations

If, for a given valuation cycle, you want valuation results for different schemes to be consistent then you will need to address this point. However the “no bias” principle may then, necessarily, become compromised at the point at which these valuations are completed.

Issue three: instability caused by demographic changes, methodology and assumptions

It is not clear how important stability is considered to be, both in terms of the employer contribution rate and the employer cost cap. Paragraph 1.1 of your paper "Establishing an employer cost cap in public service pension schemes" explains that the Government is committed to ensuring that the future costs of public service pensions remain sustainable, and that the employer cost cap mechanism should protect against any unexpected changes in costs. You also include stability as one of your principles, although the definition you attach to stability in your letter is limited to particular aspects of the way in which the existing schemes impact on the employer cost cap mechanism.

While some drivers of instability will affect the employer cost cap and the employer contribution rate to greater or lesser degrees, for the purpose of explaining why this point matters, I do not distinguish between these two purposes.

There are a number of features in the directions which, when combined with possible future demographic changes could lead to relatively unstable valuation results, but that the degree of instability cannot be anticipated at this stage. Examples include:

- Expansion or contraction of a workforce. If a workforce expands this typically means recruitment of younger employees. This acts to reduce the annual accrual costs as a percentage of pensionable pay because this cost depends on the average age of the workforce. However, this acts to reduce the spread of past service deficit as a percentage of pensionable pay because the deficit is a fixed monetary amount spread over a larger pensionable payroll. In contrast, such expansion increases the cost in monetary terms compared to a stable workforce because of the increased payroll. The reverse happens with workforce contraction; the costs as a percentage of pensionable payroll rise but the monetary costs fall. Such demographic changes could lead to the employer cost cap being breached although it is difficult to see how this can be allowed for in the directions in advance when it is not possible to anticipate whether future changes will be expansion or contraction.

- Changing normal pension age. The current plans for state pension age increasing will impact on the age profile of a scheme's workforce, as will historic changes in the schemes' pension ages as different generations of the workforce reach their retirement ages. Under the directions this could lead to an upward pressure on the cost cap future service cost which could contribute to a breach of the employer cost cap requiring reductions in benefits when, arguably, this is not a change in the cost of providing the underlying benefits.

- Actuarial methodology. For a contribution rate to be stable from year to year under the projected unit methodology the membership profile needs to remain stable (in terms of age, sex and salary distribution). Any instability caused by the two examples described above will therefore, in part, be driven by the choice of actuarial methodology.

All of these examples reinforce the importance of the review mechanism at the next valuation as mentioned earlier in this letter. In particular I think these examples emphasise the importance of keeping open the possibility that;

- consideration of a review of employer cost cap levels could be needed at the second valuations which would be the first time that the employer cost cap mechanism could be triggered, and at each subsequent valuation;

- you are likely to need to consider the need for changes to the cost cap mechanism at these subsequent valuations to "immunise" certain items which, if not immunised could be seen as inconsistent with the principles underlying the establishment of the cost cap mechanism;

- while you will almost certainly want to consider whether changes will be needed at subsequent valuations, it is impossible to predict in advance what items may trigger consideration of the need for such "immunisation".

However, in considering the outcomes of such a review, I would expect that the Government would need to consider a number of factors and balance a variety of policy objectives.

Issue four: difference between employer contributions and employer cost cap

As discussed in the background section of this letter the directions will be relevant to two different purposes; informing employer contribution rates and setting the employer cost cap. There are some key differences between the processes behind these two purposes, for example:

- the employer contribution process has an automatic re-balancing mechanism in that if, with the benefit of hindsight, a contribution rate is set that is inappropriate, this gets picked up at subsequent valuations as the demographic experience emerges. The extra costs are then spread over 15 years and included in the employer contribution rate as a past service effect. This re-balancing will happen under these directions without any further pro-active HM Treasury or legal interventions. However, this clearly does not obviate the overarching principle that the results of any individual valuation should provide as accurate an assessment of contribution rates as is possible at that time within the ranges implied by best estimates, so that the costs of employing people can be properly taken into account by their employers. By contrast, the cost cap has no automatic re-balancing mechanism and once set, needs a proactive intervention by HM Treasury to make any changes to it.

- the employer cost cap and the employer contribution rate have different effects on different groups. The employer cost cap differs in that the employer cost cap will directly impact on scheme members' reward packages should the employer cost cap be breached. In contrast, the employer contribution rate has no direct impact on scheme members' reward packages, but will have a direct impact on employers.

- for many decades there has been a track record of employer contribution rates being set under a process specific to each scheme without cross-scheme over-sight however the employer cost cap mechanism is very much new territory for public service pension scheme policy

The directions as drafted do not allow for different assumptions and methodologies to be adopted for these two different purposes but given the points above it may be worthwhile allowing the flexibility for different assumptions and methodologies to apply for these two different purposes, notwithstanding a desire to be as consistent as possible.

Issue five: short term assumptions used to set a long term cap

For schemes which re-value accrued CARE benefits in relation to earnings rather than prices increases (the Armed Forces and Firefighters schemes amongst the eight main public service workforces), the directions set out short term (up to the year ending 31 March 2018) and long term (beyond 31 March 2018) assumptions for the rates of earnings re-valuation in these CARE schemes.

I am not clear that this meets your over-riding objective because a consequence of different short term and long term assumptions for earnings re-valuation based CARE schemes appears to be a contradiction within your paper "Establishing an employer cost cap in public service pension schemes":

Paragraph 1.1 of this paper explains that the employer cost cap mechanism should "provide backstop protection against any unexpected changes in costs". Since the long term assumption differs from the short term assumption, at subsequent valuations when the cost of the scheme is compared with the cost cap, all other things being equal, differences would be expected because of the different earnings assumptions.

Paragraph 1.24 states that "the cap will be set with reference to results from the first[9] valuation". That would suggest that the assumptions used to set the employer cost cap should be the (best estimate) assumptions used in the first valuation to set the employer contribution rate including these short term and long term assumptions.

It would be helpful if you could be clearer what your specific objectives are in the light of these two statements.

Detailed Comments

I have a number of detailed points and analysis on the three specific questions you posed and these are set out in Annexes C, D and E:

- Annex C sets out my detailed analysis on the question of the extent to which the data, methodology and assumptions proposed meet the Government's over-riding objectives and principles.

- Annex D sets out some detailed points on the question of the extent to which these draft directions are technically complete and coherent. Please note that the resolution of each of the points in Annex D will not necessarily lead to directions which, at a detailed level, are fully "technically complete and coherent". The complex nature of actuarial valuations means that it is not possible to anticipate every possible question on how to complete a valuation which could arise during the course of carrying out an actuarial valuation until the valuation is finished. Nevertheless this does not detract from my comment earlier that, in the round, these directions are technically coherent and complete. This does again reinforce the importance of review mechanisms at subsequent valuations mentioned earlier in this letter.

- Annex E sets out some thoughts on practical challenges which could arise as a consequence of the draft directions and some suggestions for how to approach such challenges.

These Annexes do not affect the headline points made in the main body of this letter but I hope they will provide some helpful extra pointers in a number of areas as you consider if and how to make any changes to the draft directions.

Limitations and next steps

Please note that in considering these draft directions I have not considered every detailed aspect of them. For example, I have not comprehensively reviewed the directions for incorrect direction cross-references, typographical errors, or the extent to which the language in the directions is

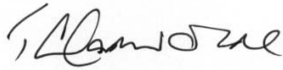
[9] I understand the "first valuation" in this paper means what is described as the "preliminary valuation" under the directions.

legally well defined. These and a number of other important limitations of this letter are set out in Annex F.

As mentioned earlier I am aware that HM Treasury is also seeking comments on these draft directions from other scheme stakeholders and the first natural next step will be for you to reflect on my comments in this letter alongside the comments you receive from other scheme stakeholders. As touched on earlier I understand that you will consult me on a further draft of the directions in due course.

I am available at any time to address any questions you may have or to undertake any future analysis.

Yours sincerely



Trevor Llanwarne

Government Actuary

Annexes:

- Annex A - Your letter of 10 October 2013
- Annex B - Summary of background to valuations
- Annex C - Data, methodology and assumptions
- Annex D - Technical completeness and coherence
- Annex E - Practical challenges
- Annex F - Limitations

Annex A - Your letter of 10 October 2013

Dear Trevor

Thank you for your letter of 25 February 2013 confirming that you are content for officials to begin preparatory work on draft Treasury Directions on valuations of the public service pension schemes.

As you know, Section 11(2) of the Public Service Pensions Act 2013 enables HM Treasury to make Directions regarding valuations of the public service pension schemes made under that Act, and relevant connected schemes. Section 12(3) of the Act also enables HM Treasury to make Directions setting out how the employer cost caps will be set for schemes made under the Act.

The Government's over-riding objective which these directions seek to achieve is to implement the Government's intended approach to:

- actuarial valuations of public service pension schemes; and
- establishing an employer cost cap in public service pension schemes

set out in the two papers on these two subjects published in November 2012 (attached as Annexes A and B).

Annex C of this letter sets out the principles to which officials have had regard in preparing this first draft of the directions for your consideration.

As part of this preparatory work, a resulting draft set of Directions is attached to this letter as Annex D.

I would be grateful if you could offer your initial professional opinion on the actuarial aspects of these Directions. In particular, I would welcome your views on the extent to which:

- the data, methodology and assumptions proposed in these draft Directions at Annex D meet the Government's over-riding objectives and principles set out in Annexes A, B and C;
- these draft directions are technically complete and coherent; and
- any practical challenges could arise as a consequence of these draft directions - and any suggestions for how to approach such challenges.

The Treasury will discuss these Directions further with the Departments responsible for the public service pension schemes, and with other interested stakeholders, before the final Directions are issued for use by the public service schemes in conducting their valuations.

For reference I attach in Annexes E and F the covering letter and an FAQ document which we are issuing to other interested stakeholders as part of the process of consulting with them on these draft Directions.

I intend to consult you on a further draft of these Directions, taking account of your response to this letter and stakeholder comments, for final, formal, consultation before these Directions are made.

The Treasury will keep these Directions under review, firstly to ensure that they continue to reflect Treasury policy, and secondly to take account of any developments that are relevant to public service pension scheme cost measurement and control. In particular, the Treasury will review these Directions before each valuation round to ensure that they remain fit for

purpose. In line with the Treasury's obligations under the Public Service Pensions Act 2013, the Treasury will consult you (or your successors) before any amendments or additions are made to these directions.

Yours sincerely

Julian Kelly

Annex B - Summary of background to valuations

Please note this summary is applicable to the unfunded public service pension schemes. Some of the details differ for the local government schemes (e.g. for local government schemes the frequency of assessment is 3 years not 4 years under the directions - to align with the local valuation cycles).

Summary of calculation approach required by draft directions

Valuation aspect	Employer contribution rate	Employer cost cap / cost cap cost of the scheme	Diff No.
Timing			
Effective date of first valuation under directions	2012	2012	
Frequency of re-assessment	4 years	4 years	
Date past service effects measured from	"Previous valuation"	New scheme start date	1
Benefits included (past service)			
Existing scheme deferred and pensioners	Yes	No	2
Existing scheme actives	Yes	Yes	
New scheme all members	Yes	Yes	
Benefits included (future service)			
Existing scheme benefits	Yes	No	3
New scheme benefits	Yes	Yes	
Data, methodology and assumptions			
Membership and other data	(same)		
Scope for data projections	(differ because of different treatment of existing scheme benefits in future service)		4
Projected unit method	(same)		
15 year spread for past service effects	(same)		
SCAPE discount rate of 3% above CPI	(same)		
Long term earnings growth 4.75% pa	(same)		
Allowance for short term earnings growth	(same)		
ONS based mortality improvements	(same)		
Best estimate other assumptions (primarily demographic assumptions)	(differ because of different treatment of existing scheme benefits in future service)		5

Index of draft directions which make provision for calculation differences

1. For the employer contribution rate, past service effects are measured from previous valuations through direction 32 setting a scheme's "notional assets" equal to the figures in Schedule 2 of the directions. For the cost cap cost of the scheme, past service effects are measured from the start date of the new scheme through direction 40(1)(a) setting a scheme's cost cap fund equal to liabilities at the closing date of the existing scheme.

2. Past service effects relating to existing scheme deferred and pensioner members are excluded from the employer cost cap and cost cap cost of the scheme through:

    a. the exclusion of liabilities relating to existing scheme deferred and pensioner members in direction 40(1)(a) from the opening balance of the cost cap fund

    b. the removal of "cost cap net leavers liabilities" from the cost cap fund (item D in direction 52 as defined in direction 48)

    c. the exclusion of benefits paid to existing scheme deferred and pensioner members when determining the benefits to be deducted from the cost cap fund, item C in direction 52 as defined in (direction 47(b))

    d. the exclusion of liabilities relating to existing scheme deferred and pensioner members from the cost cap liabilities in direction 54

3. Existing scheme benefits are ignored when determining the employer cost cap and cost cap cost of the scheme for future service through direction 56(2) and direction 65(2). These directions require existing scheme service (including any transitional protection arrangements) to be ignored for employer cost cap and cost cap cost of the scheme purposes.

4. This is a consequence of difference 3 and the application of direction 56(2) and direction 65(2) to the general specification of the data, methodology and assumptions.

5. As above, this is also a consequence of difference 3 and the application of direction 56(2) and direction 65(2) to the general specification of the data, methodology and assumptions.

Annex C - Data, methodology and assumptions

This Annex sets out an analysis of how the data, methodology and assumptions specified in the directions compare against your requirements.

The data, methodology and assumptions are set out in directions 14 to 27.

Directions 14, 15, 17, 19, 21, 22, 25(d) and 27 do not contain significant actuarial aspects and so the analysis below covers directions 16, 18, 20, 23, 24, 25(a), 25(b), 25(c) and 26. The figures set out in Schedule 2 are also commented on as these are effectively part of the data that are needed to determine the valuation results.

Your over-riding objective which the draft directions seek to achieve is to implement the Government's intended approach to actuarial valuations of public service pension schemes and establishing an employer cost cap in public service pension schemes as set out in the two papers on these two subjects which you published in November 2012.

These papers specify that the SCAPE discount rate of 3% plus CPI should be used (paragraphs A.14 to A.16); life expectancy improvement assumptions should be in line with the Office for National Statistics most recent principal population projections for the United Kingdom (paragraph A.20), and that past service costs will be spread over 15 years (paragraph A.28). Directions 18, 25(a) and 25(b) simply confirm these statements and therefore meet your over-riding objective so I do not consider them further.

That leaves directions 16, 20, 23, 24, 25(c) and 26 and Schedule 2. Your over-riding objective leaves scope for different approaches in these directions so these directions have then been considered against your principles.

The discount rate principle is not relevant to the data, methodology and assumptions set out in these remaining directions and, because the principles of cost control, sustainability, technical immunity and stability relate to the operation of the cost cap rather than the data, methodology and assumptions these principles are not relevant to the analysis in this Annex either.

The remainder of this Annex therefore compares directions 16, 20, 23, 24, 25(c) and 26 and Schedule 2 against the four principles of completeness, no bias (or best estimate), clarity and consistency. This analysis provides additional detail over and above relevant points from the main body of the letter.

Direction 16 - projected unit methodology

Direction 16 requires that the projected unit methodology should be used to determine valuation results (relating to both the employer contribution rate and the employer cost cap). Different possible interpretations of the precise meaning of "projected unit methodology" are discussed in paragraph 3 of Annex D but the general features of this methodology are well defined.

Before discussing the extent to which the projected unit methodology fits the principles you are working to it will be helpful if some background on actuarial methodologies are set out.

<u>Actuarial methodologies - background</u>

In general an actuarial methodology determines the calculations necessary to combine the valuation data and assumptions to assess the scheme's liability to pay benefits in relation to service already worked up to the valuation date (i.e. "past service"), and to calculate an

appropriate contribution rate (usually as a % of pensionable pay) to "pay for" the cost of benefits that will be accruing going forward (i.e. "future service").
The choice of actuarial methodology can affect the timing and amounts of contributions but does not generally affect the underlying cost of providing the benefits. This is because the same benefits need to be paid at the same time under any methodology. However under one methodology more contributions may be payable earlier (generating more "investment return" earlier) with fewer contributions then required later. This situation can be vice versa under a different alternative methodology.

It is also worth noting that with an employer cost cap arrangement it would be possible that the choice of actuarial methodology could affect the cost of providing benefits - if one methodology led to a breach of the employer cost cap when another would not.

In practice it is not possible to anticipate every possible development that could take place in every future valuation of a public service pension scheme and this means that there is no way of knowing now whether any particular choice of methodology is more or less likely to lead to a breach of the employer cost cap. There may be some future circumstances where one methodology is more likely to lead to a breach and other future circumstances where the same methodology is less likely to lead to a breach.

Three of the most commonly used actuarial methodologies are discussed in more detail below.

- Attained Age Method (AAM) - under this methodology the contribution rate is assessed for the current membership of the scheme. Accrual of benefits from a specified current date to the period up to the expected date of leaving service is valued and then expressed as a percentage of expected future pensionable pay over the same period.

- Entry Age Method (EAM) - the approach is similar to the AAM except that the calculation is based on a profile of new entrants rather than the current membership (so "all service" rather than "future service" is considered). The "future service" cost under the EAM is not sensitive to a scheme's current membership profile but is sensitive to the assumed new entrant profile.

- Projected Unit Method (PUM) - the approach is similar to the AAM except that the future benefit accrual and future pensionable pay are valued to the earlier of the expected date of leaving or the end of the "control period" - the control period is typically a number of years. When assessing the value of future benefit accruals allowance is still made for in-service indexation for CARE benefits and final salary linking for final salary benefits beyond the control period to expected date of leaving service.

With AAM and PUM the past service liabilities are the same whereas under an EAM approach a different figure is generally arrived at for past service liabilities.

Analysis of PUM against principles for employer contribution rate purposes

The consistency principle suggests that the same methodology should be used for all the schemes since there are no differences between the characteristics of the different public service workforces which would suggest one methodology over another. However the consistency principle does not suggest that any one of the PUM, AAM or EAM is a better match than either of the other two methods.

For a closed workforce the no bias principle might suggest that the PUM is less appropriate than the AAM. However the public service workforces are not closed and so, like the consistency principle, the no bias principle does not suggest that any one of the PUM, AAM or EAM is a better match either.

The completeness and clarity principles are more relevant.

One feature of the PUM is that contributions relate to the costs of benefits accruing over the period following a valuation. Therefore the PUM is a better fit than the EAM or AAM with the completeness principle since under the PUM employers pay for the cost of current accruals as they happen (recognising that the cost as a percentage of payroll rises if the workforce ages).

Coming on to the clarity principle it is important not to lose sight of the significant prior histories which the public service pension schemes have. This history is often complicated by different sections of the schemes having been opened and closed at different times in the past. Further, barring those close to retirement, the new schemes coming in under the PSPA 2013 will take on scheme members who are mid-way through their careers not just new entrants.

The clarity principle covers two points. I would expect that any choice of methodology would be able to fulfil the condition that "valuation reports include sufficient information to allow those who are technically competent to understand how the valuation has been carried out". However, given the schemes' significant prior histories it may be the case that the PUM would deliver valuation reports that:

- provide clearer and more transparent assessments of scheme costs and
- include information that may be more helpful to scheme members and stakeholders in understanding the cost of providing benefits

than the EAM or AAM. Two examples which illustrate this point are that:

- under EAM, assumptions for the average age of new entrants would need to be determined, however it is generally difficult to determine new entrants assumptions when any analysis of historic and current average ages of new entrants are complicated by previous changes in scheme design and cycles of workforce expansion and contraction

- under AAM, the re-calculation of contribution rates at subsequent valuations in respect of sections that are already closed to new entrants and have already previously been assessed under the AAM could lead to valuation reports disclosing methodological surpluses or deficits which may not be easily understood by scheme members

Analysis of PUM against principles for employer cost cap purposes

For the purposes of setting the cost cap and ensuring changes in the costs of the scheme against the cap, the completeness principle does not apply. However the arguments about the clarity principle remain because changes between successive valuations in the value of benefits accrued in the existing schemes do affect the measurement of changes in the cost

of the scheme against the cost cap (via the cost cap past service cost) so long as the benefits being valued are in respect of active members.

The above analysis suggests that, in the round, the use of the PUM for employer contribution rate and employer cost cap purposes does, to a significant degree, meet the principles, with some met better than others. However the choice of PUM does not stand out above AAM or EAM, as clearly being the best match to your principles.

Direction 20 - data projections

Direction 20 requires the scheme actuary to use the scheme membership and other data to determine the valuation results. This direction also requires various data projections to be made where doing so would produce a more accurate estimate of the membership and have a material impact on valuation results. The required projection periods generally fall between the effective date (when the scheme membership data gives a full picture of the membership) and the end of the implementation period, generally expected to be seven years after the effective date.

The no bias and clarity principles are relevant to these data projection directions.

Requiring a more accurate projection of the membership (assessed within the bounds of having a material impact on the valuation results) does sit comfortably with the principle of no bias. However there is a subtle but potentially important difference between “no bias” and the way the data projection directions are framed.

How a scheme’s membership profile changes over the (up-to) seven year projection period will depend on recruitment and retention policies and patterns anticipated over this period. There may therefore be considerable uncertainty over the expected scheme membership such that two different data projections could both be considered to have no bias, but which could give different valuation results when rounded to the nearest 0.1% of pensionable pay (the degree of rounding generally required in the directions - and note the discussion on this in paragraphs 20 to 23 of Annex E).

The application of directions 56(2) and 65(2) to direction 20 for cost cap purposes also creates the possibility that two different data projections may be required for each valuation, one for each of the two purposes of the valuation. While this is consistent with the potential for, say, two different sets of retirement assumptions for the two different purposes, the use of two different data projections is unlikely to help meet the objective of the clarity principle.

Overall, there is a case for deleting the data projection directions and leaving data projection decisions to be made under the same best estimate requirements and processes as for other assumption setting. Many of the arguments stated in the main body of the letter would support this deletion and a review mechanism at subsequent valuations would still enable resolution of any unwanted future consequences. This point is also covered in paragraph 6 of Annex D.

Directions 23 and 24 - earnings growth assumptions

Directions 23 and 24 set out assumptions for the rates of public service earnings growth with specific annual figures set out up to the year ending 31 March 2018 (the “short term” assumptions), and a single rate for each year beyond 31 March 2018 (the “long term” assumption).

The no bias and consistency principles are relevant to these assumptions. The assumptions are based on OBR forecasts which are intended to be best estimates without any margins for prudence or optimism so this fits well with the no bias principle. The use of the same

assumption for each of the different public service workforces also fits well with the consistency principle.

While these figures are OBR's best estimates, other scheme stakeholders and outside commentators may have different views of what best estimates for these assumptions may be. The OBR's figures can be considered reasonable best estimates but this is not to say that other assumptions could not also reasonably be deemed to be best estimates. However, given that these estimates are derived from the Government's own independent forecaster, I consider this a reasonable approach to take.

Direction 25(c) - state pension age (SPA)

Direction 25(c) requires an assumption that when the Secretary of State has made a public statement proposing a change to the state pension age, the proposed change to state pension age has already been made.

The no bias and clarity principles are relevant to this assumption.

As the PSPA 2013 requires new public service pension schemes (with the exception of those providing benefits for certain uniformed services) to have a normal retirement age linked to state pension age, many of the valuation results will be significantly sensitive to the assumed SPA of the scheme members. This assumption therefore matches the no bias principle since using the latest policy on SPA will ensure that valuation results reflect current best estimates of the cost of the scheme.

However, it is noted that current and future public statements proposing a change to the state pension age could include a varying degree of detail and so, depending on the nature and detail of any such public statement there may be scope for, potentially unwanted, different interpretations of this direction by different schemes. To match well with the clarity principle it may therefore be necessary to be more prescriptive on state pension age assumptions.

Direction 26 - other assumptions

Direction 26 requires that all other assumptions should be the responsible authority's best estimates and not include margins for prudence or optimism. Aside from the discussions around whether best estimate or consistency should take precedence and around inconsistency consequences of timing practicalities, which I raise in the body of this letter, I have no other comments on how this direction matches your principles.

Schedule 2 - notional assets for first valuation

Schedule 2 of the directions lists various figures which are to be used as the SCAPE account balances as at various dates for each of the main public service pension schemes except those in respect of local government workers.

Although these figures do not feature under the sections of the directions which cover data, methodology and assumptions, these are effectively data items and so some comments are set out below on these figures and your principles.

The principles relevant to these figures are completeness and consistency.

The figures in Schedule 2 are taken from previous valuations of the public service pension schemes. Valuations of the public service pension schemes have not previously been carried out under HM Treasury directions and the valuation cycles for different public service pension schemes have generally not been aligned (as the range of dates in Schedule 2 illustrates). It is

therefore likely that there will be some inconsistencies in the valuation results between schemes in these historic valuations. This does not fit too well with the consistency principle.

The completeness principle creates a direct tension with the consistency principle because current employer contribution rates will generally have been set on the basis of these historic valuations and so using the SCAPE account balances from these historic valuations does fit with the completeness principle ("costs should include any past service effects that have arisen since previous valuations").

Given this tension between the completeness and consistency principles it would not be possible for any set of figures in Schedule 2 to fully meet all your principles but I note there does remain a degree of consistency in that the use of previous valuation results has been applied consistently to all the public service pension schemes.

Annex D - Technical completeness and coherence

This Annex has been prepared by GAD's Technical Committee and sets out some specific points which may be worth considering for the purpose of technical completeness and coherence:

1. Direction 2 provides a definition of "inter-valuation period". The term "inter-valuation period" appears in direction 10 but it is not clear if or how this is intended to relate to direction 27 (analysis of the demographic experience). In addition, for a preliminary valuation, it appears that the inter-valuation period starts and finishes on the same day. You may want to consider what the intention is on these points.

2. Direction 2 provides a definition of "valuation report". You may want to consider whether it would be clearer to include in this definition references to all the disclosures required in a valuation report rather than just those specified in directions 28 to 30 (e.g. directions 34 and 35 require some disclosures).

3. Direction 16(1) requires the use of the projected unit methodology to determine valuation results. The term "projected unit methodology" has a common general meaning amongst pension actuaries and some of its features are distinct from other actuarial methodologies (e.g. the "new entrant" methodology or "attained age" methodology). In particular pension actuaries will commonly understand the "projected unit methodology" to mean that:

    a) an assessment of the schemes' liabilities generally includes liabilities in respect of pensionable service up to the valuation date (termed "the effective date" in the draft directions) but not after the valuation date

    b) when determining a contribution rate to cover costs accruing in a future period beyond the valuation date, pensionable service which is taken into account is generally limited to that expected to accrue over a future period - the "control period" - which is usually a fixed number of years - most commonly one year

    c) when assessing both schemes' liabilities in a) above and future service costs in b) above allowance should be made for:

        - in-service indexation for CARE benefits
        - final salary linking for final salary benefits

        until the member is expected to leave pensionable service (i.e. including any time beyond the end of the control period)

    The directions do not specify a "control period", however where the directions require a future service cost to be determined they do specify the period over which accruing costs should be assessed (e.g. "the implementation period"). These relevant periods in the directions are typically three or four years.

    Determining accrual costs under the "projected unit methodology" over a period during which a significant proportion of the current membership are expected to leave service can leave room for interpretation as to what "projected unit methodology "means - in particular whether or not allowance for new entrants over the period should be allowed for.

    In line with:

        - your "no bias" principle,
        - the expectation that there will be new entrants into the schemes in the future and that

- the directions do not explicitly require an assumption that there are no new entrants to the scheme (though please see paragraph 8 below),

your intention is presumably that allowance should be made (either explicitly or implicitly) for new entrants when using the projected unit methodology but you may want to consider whether this could be made clearer.

4. Direction 16(2) requires that when using the projected unit methodology benefits must be attributed to periods of service in accordance with International Accounting Standard 19: Employee benefits (IAS19).

   It is understood that there are currently (at least) two approaches to attributing periods of service in a career average scheme when using the projected unit methodology which are permitted under IAS19. These two approaches can be termed the “current salary method” and the “average salary method”. Under the “current salary method” accrued benefits are based on a member’s current salary (with re-valued salary from past years) whereas under the “average salary method” accrued benefits are based on a member’s average re-valued salary (including allowance for future salary increases) projected to the time they are assumed to leave active service. Under both approaches accrued benefits are based on projected re-valuation of benefits to exit (i.e. feature c) of the PUM described in paragraph 3 above is a feature of both these approaches). These approaches could lead to significantly different valuation results and so you may wish to consider providing direction on which approach you expect scheme actuaries to use.

   IAS19 also leaves some room for interpretation over how to attribute periods of service which are granted as “benefit enhancements” (typically where scheme members receive benefits following ill health and death in service). Variation in interpretation of this point is less likely to have a material impact on valuation results than the choice between the “current salary method” and the “average salary method”. Nevertheless, you may wish to consider providing further direction on which periods of service to attribute these benefit enhancements to under the projected unit methodology.

5. Direction 18 requires three specific valuation results to be calculated assuming that the rates will be payable for 15 years from the implementation date. However direction 57 requires one of these specific valuation results to be calculated assuming that the rate will be payable for 15 years from the effective date. To achieve coherence either direction 57 needs to refer to implementation date or the part of direction 18 which relates to direction 57 needs to refer to the effective date. You may want to consider how to take this forward.

6. Direction 20 requires various data projections to be made under various circumstances. In particular a projection should be made if doing so would lead to a “more accurate” estimate of the future membership and have a “material impact” on the valuation results. As expanded in the discussion of direction 20 in Annex C above, there is a distinction between “no bias” or “best estimate” and “more accurate” or “material impact”. Setting aside the question of new entrant assumptions (which I come on to in paragraph 8 below), “data projections up to the end of the implementation period” is effectively just another way of describing the various other demographic assumptions listed in direction 26(c) which relate to active members ceasing active pensionable service as applied up to the end of the implementation period. You may therefore want to consider removing this direction completely and this possibility is also discussed in Annex C.

7. Direction 21(2)(i) sets an assumption for the April 2014 Pension increase order. Since you wrote, ONS have published the September 2013 CPI figure which usually informs the pension increases. The ONS figure is 2.7% not 2.9% (an OBR forecast) so you may want to update this.

8. Directions 26(c) on valuation assumptions, 27(1) on aspects of demographic experience, and 59(b)(iv) on the cost cap analysis do not specifically mention numbers or demographic profiles of new entrants. Many of the valuation results required by the directions are the costs of benefits (expressed as a percentage of pensionable pay) accruing over a future period. For example at the preliminary valuation, direction 36(1)(d) requires the costs of benefit accruing over the period from 1 April 2015 to 31 March 2019 to be assessed. When rounded to 0.1% of pensionable pay, these costs are likely to be sensitive to the numbers and profiles of new entrants joining over that period so you may want to consider including new entrants in each of these lists.

9. Direction 32 explains that “D” represents “notional investment returns on the notional assets of the scheme”. This direction is not clear as to whether notional investment returns should also be allowed for on income received net of benefits paid over the relevant period. You may want to consider whether this should be made clearer. An equivalent point applies in respect of direction 50.

10. Direction 33 (in the part of the directions below the sub-heading “the valuation report: employer contribution rate”) is not explicit on which year’s PI order should be compounded with which discount rate to determine the rate of notional investment returns for a given year. For example to determine the notional investment returns over the year to 31st March 2012 should 3% be compounded with the PI order of 3.1% awarded in April 2011 or the PI order of 5.2% awarded in April 2012. There is a natural read across from direction 25(a) which determines the discount rate each year (and in this example would suggest the PI order from April 2012). It may be helpful to make this clearer in direction 33 (and in direction 51 which is the corresponding direction in the employer cost cap part of the directions).

11. Direction 38 includes cross-references to directions 36(a), 36(c) and 36(d). It appears that these should be references to directions 36(1)(a), 36(1)(c) and 36(1)(d) respectively.

12. Directions 38(2) and 38(3) will need interpreting for a preliminary valuation but it is not clear how they should be interpreted since the provisions schemes make for the rate at which employers contribute will (as long as new scheme regulations made under Section 3 of the PSPA 2013 are not in place yet) be the provisions, if any, in current scheme regulations and not the proposed new employer contribution rates. As the intention is to sign off the directions before scheme regulations you may want to consider whether this direction needs amending accordingly.

13. Direction 39(2)(a) requires for local government scheme valuations that, in direction 32, income received by the scheme over the inter-valuation period is adjusted as if the rate at which all employers had made employer contributions over the inter-valuation period had been at the employer contribution rate disclosed at the previous valuation. It is understood that the rates that employers actually pay as set at local fund valuations are not relevant for the notional SCAPE valuation of LGPS required by Part 2. The scope of this direction is limited to direction 32 but it may be that this should have a wider application within the directions (e.g. to direction 37(b) which is presumably not intended to establish the average employer contribution yield across all the different local fund employer contribution rates). You may therefore want to consider widening the scope of direction 39(2)(a).

14. Direction 40(1)(b)(ii) requires the use of the assumptions used in the preliminary valuation which were used to set the cap when setting the opening balance of the cost cap fund. The opening balance of the cost cap fund only includes liabilities in respect of service in the existing scheme but the calculations used to set the cap in the preliminary valuation are based on an assumption that the existing schemes do not exist. This appears to

suggest the opening balance of the cost cap fund is zero. Presumably this is not intended and so this might suggest that the opening balance of the cost cap fund should be set using the assumptions from the preliminary valuation used to set the employer contribution rate, not the employer cost cap. You may want to consider this point. This applies in an equivalent way to directions 42(2)(b) and 43(2) in respect of the cost cap fund contribution rate.

15. Direction 49(a) requires that the "cost cap net leavers liabilities" are calculated at the point in time when a member leaves pensionable service before any benefits have been paid. Where members have an option to commute pension for lump sum (or any other option) on retirement it is therefore not clear whether the cost cap net leavers liabilities should be calculated using an assumed commutation rate (which will typically be an average figure across the whole membership) or the actual rate that the member chooses. In practice administrative arrangements may vary by scheme and could require commutation decisions to be made either in advance of retirement or after retirement. It may be helpful to make clear in this direction whether the commutation rate to be used when determining cost cap net leavers liabilities is the valuation assumption or the actual proportion of pension that the member commutes.

16. Direction 56(2) (and direction 65(2)) requires the data, methodology and assumptions in directions 14 to 26 to be adjusted as though (paraphrasing) "the current schemes do not exist and all members are accruing benefits in the new scheme". The impact of this assumption on each of the data methodology and assumptions items in directions 14 to 26 will be more or less clear for each of the directions. For example it is not clear that the existence or not of the current schemes would have any impact on the discount rate set out in direction 25(a); but it would be more likely that the existence or not of the current schemes would impact on age retirement rates determined under direction 26(c)(ii). In direction 56(2) (and direction 65(2)) you may want to consider refining which directions, amongst those in directions 14 to 26, should be re-considered when assuming the current schemes do not exist.

17. Direction 62 (and direction 64) refers to directions "31 to 38". It is understood these references should extend to direction 39.

Annex E - Practical challenges

This Annex describes some of the practical challenges that could arise as a result of these directions along with some initial suggestions for how you might approach some of these challenges. These points are in addition to the five major issues set out in the main body of this letter.

Communications

1. The valuations are complex exercises and the dual purpose of the valuations; to inform the employer contribution rate and set the employer contribution cap, is noted. This dual purpose may lead to some communication challenges.

2. For example one consequence of these directions will be that it is possible for the employer contribution rate to be significantly higher or lower than the employer cost cap without the employer cost cap being breached and some scheme stakeholders may well be expecting that, for each scheme, the employer contribution rate and the employer contribution cap emerging from the 2012 valuations are the same figure. In fact these two figures are likely to differ for all schemes.

3. Your completeness principle about determining employer contribution rates is that, taken together, employer and employee contributions should reflect the full expected cost of benefits provided by the scheme, including any past service costs that have arisen since previous valuations. The possibility of differences between employer contribution rates and employer cost caps/cost cap cost of the schemes arises because various commitments, which I understand you have made to scheme stakeholders (to ensure that the employer cost cap is not breached for particular reasons[10]), run contrary to the completeness principle (as it applies to determining employer contribution rates), hence these communication challenges are likely to arise.

4. This challenge could be approached through clear and consistent use of the terms “employer contribution rate” and “employer cost cap” when communicating scheme results and explaining the meaning of both terms when mentioning either of them.

5. Addressing this communication challenge will also need consideration of the following points:

   - HM Treasury published “cost ceilings” for most of the public service pension schemes between 2011 and 2012. These figures were used to inform negotiations on the benefit design for the new schemes. It is likely that a scheme’s cost ceiling will also differ from both the scheme’s employer contribution rate and the scheme’s employer cost cap.

   - Lord Hutton’s final report on his review of public service pensions used the term “cost ceiling” to describe what he was envisaging, and which has now become, the “employer cost cap”.

Reform to Fair Deal and access to schemes

6. As you may be aware, in 2011 advice was given to James Richardson on the appropriateness of using a SCAPE discount rate of 3% over CPI as part of the SCAPE discount rate consultation. This advice was set out in a letter to James dated 23 March

[10] For example, when determining the employer cost cap, past service costs are “re-set to zero” from the date from which the new schemes come into force so that the new schemes are not subject to changes in cost which have been assessed before the new schemes start.

2011. I understand that the number of independent providers may increase, potentially significantly, under new Fair Deal, and so therefore it is important to re-confirm the advice in that letter with regard to access to public service pension schemes for independent providers.

7. In that 2011 advice, the two key objectives for consideration were; that the discount rate should represent a fair reflection of costs and that the discount rate should reflect future risks to Government income. Against that background a SCAPE discount rate of 3% above CPI, in line with expected GDP growth was stated in the letter as reasonable. I am not aware of any obvious reason why this opinion should change now.

8. In addition, in section (v) of Annex D of that letter it was stated that, for pragmatic reasons, it is reasonable to charge independent providers (with access to public service pension schemes) contribution rates based on the SCAPE discount rate. This conclusion was reached despite the point, also highlighted in section (v), that arguments could be made that independent providers should pay a different charge than public service employers because the Government is taking on extra risks when offering these providers access to the public service pension schemes. So whilst the statement on pragmatism remains relevant, I understand you have satisfied yourself that you are comfortable in retaining this pragmatism, in view of the other mechanisms that the Government will establish to control any risk associated with the new Fair Deal arrangements.

9. It is worth noting that there are other mechanisms (e.g. adding a risk premium to the SCAPE based employer contribution rate for independent providers, requiring independent providers to provide indemnities, guarantees or bonds, etc) at the disposal of schemes/government which could be used to mitigate the extra risk resulting from an increase in independent providers with access to public service pension schemes.

10. New Fair Deal could create another practical issue which needs to be considered. If for any scheme there is a large influx of readmitted members, this could impact on stability of contribution rates or affect whether the cost cap is breached. It will be impossible to know in advance how to handle this.

Dovetailing with Local Government parallel cost control process

11. The LGPS Scheme Advisory Board will undertake its own cost management process (the "Scheme Total Target Cost" or STTC process) in parallel to the statutory cost cap process described in these directions. Given that the STTC process is not on a statutory footing it is probably unnecessary to explicitly cover it in these directions. The Scheme Advisory Board has produced a provisional timetable explaining how this is intended to work[11]. This timetable indicates that the statutory cost cap process would not be expected to come into play until any changes under the STTC process were agreed. Although it is not urgent (as it will not apply to the preliminary valuation) you might like to consider the practical implications of this.

Data collection challenges

12. Direction 40(1)(b)(iii) requires scheme membership data to be collected (for the purpose of setting the opening balance of the cost cap fund) at a date which is not a valuation "effective date". Directions 48 and 49 (which set out how the cost cap net leavers' liabilities should be calculated) require detailed membership data in respect of scheme members who leave service between two valuations at their date of exit. Direction 14(4) (which is specific to the local government scheme in England and Wales) will require

[11] http://www.lgpsboard.org/images/PDF/CMCAugust2013/LGPSTimetable

LGPS Administering Authorities to keep more detailed records of pension accruals (including for pensions once in payment) than would typically be kept.

13. For some schemes these data requirements may go beyond the data that has typically been provided to complete valuations of public service pension schemes in the past. Direction 59 (setting out the required cost cap analysis) may also require more data than has been typically provided at previous valuations.

14. To ensure that schemes are able to provide the necessary data (which would be needed for the first time at the first valuations, generally the "2016 round") it would be worthwhile liaising with schemes to ensure they appreciate the implications of this for their administration systems.

Membership data improvements

15. Part of the valuation process involves the scheme actuary carrying out checks on the membership data they have been provided with. There have been occasions in the past, and there will no doubt be occasions in the future, when these data checking processes reveal issues with the membership data used at a previous valuation. For example, during a valuation's data checking process it may transpire that the data used in a previous valuation was incomplete (i.e. missing membership records) or distorted (e.g. under-recording of the numbers of deaths).

16. While for employer contribution rate purposes the completeness principle will mean that any "incorrect" contribution levels caused by previous data issues are automatically allowed for at subsequent valuations, this could cause difficult practical challenges for employer cost cap purposes. In particular what happens if an improvement in data quality leads to a breach of the margins either side of the employer cost cap?

17. It may be argued that such an event should not lead to the further reform processes that would be triggered by such a breach but this appears to be the implications of the directions as they stand. Such issues may be best addressed as they arise as it is impossible to predict what data errors could arise but you may want to consider and be clear now what processes you would expect schemes and HM Treasury to follow in such a situation.

Including methodology and data projections in best estimate sign off processes

18. Direction 26 requires all other assumptions not covered elsewhere in the directions to be the scheme's responsible authority's (generally the relevant minister's) best estimate. In the main body of this letter I discuss any objectives you may have in ensuring that ministers that set these assumptions do so in a consistent way. I also suggest possible ways to achieve any consistency objectives you may have.

19. Whatever the outcome on this issue it will be important to ensure that the outcome comprehensively covers any miscellaneous methodological decisions and data projections schemes make to achieve best estimate results, as well as the demographic assumptions adopted.

Implications of results rounded to 0.1% of pensionable pay

20. Whenever the directions require valuation results expressed as a percentage of pensionable pay, they require the relevant valuation result to be rounded to the nearest 0.1% of pensionable pay. This is not an unreasonable degree of rounding and, for a given

set of assumptions scheme actuaries will be able to determine the value of valuation results to this degree of rounding. This degree of rounding is also consistent with that shown in recent past valuations, for example the Teachers' Pension Scheme employer contribution rate is currently 14.1%.

21. However, as stated, this is not a statement of the accuracy to which the valuation results can be relied upon as an assessment of the costs which are expected to emerge over many decades but simply a statement of how to present the results of any calculation. It is important to note therefore that this degree of rounding can generate a false sense of security about the accuracy of valuation results and therefore potentially lead to spurious debate about what assumptions should be adopted.

22. However, this should not be taken to mean that an estimate of future costs of e.g. 16.2% will inevitably turn out to be a more accurate estimate than, for example 16.4% or another estimate within reasonable proximity. The true costs of providing the pension benefits being accrued today will not be known for many decades, and the degree of uncertainty therefore attaching to these costs is likely to mean that, in the event, costs will be different from estimates today, even when they are based on best estimate assumptions. This inherent uncertainty around assumptions and future costs, combined with a 0.1% rounding threshold could lead to various practical challenges during the assumption setting process. Not losing sight of the genuine uncertainties attaching to the costs of pension provision can help with addressing such challenges.

23. In making these points it is of course recognized that once a best estimate basis has been settled for the preliminary valuations the consistency principle would require subsequent valuations to follow the same such basis (in the absence of compelling evidence for change).

Annex F - Limitations

This Annex sets out the limitations of this letter. This letter should be read in the context of these limitations:

1. As already mentioned, the directions have not been comprehensively reviewed for incorrect direction cross-references, typographical errors, or the extent to which the language in the directions is legally well defined.

2. There has been no focus on how these directions apply to Public Body schemes. It is understood that legal drafting work is still underway to ensure that the application of the directions to Public Body schemes is appropriate.

3. The directions have been considered as they apply to public service pension schemes in general but have not been considered as they apply to any specific public service pension scheme or any specific devolved administration.

Purpose, users and commissioning

This letter has been prepared at the request of HM Treasury. The purpose of this letter is to set out the initial professional opinion on the draft directions.

Third party reliance and liability

HM Treasury can release this letter to third parties, provided that:

- it is released in full including the addresses names and signatures
- the advice is not quoted selectively or partially, and
- All parties with an interest should be told to seek their own actuarial advice where appropriate and that they cannot place reliance on this letter without making such a request.