DWP Department for Work and Pensions

The Financial Assistance Scheme

Example calculations for a valuation for relevant FAS qualifying schemes

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Example calculations for a valuation for relevant Financial Assistance Scheme (FAS) qualifying schemes

Introduction

1. This document should be considered alongside the guidance titled 'Guidance on method and assumptions to use when undertaking a valuation under Regulation 22 of the Financial Assistance Scheme Regulations 2005 (version GA1)' which is published as a separate document and referred to below as 'the Asset Share guidance'.

2. This document sets out some examples of how the asset share calculations might work for schemes transferring assets to government. It first shows the relevant statutory priority order and the basis on which the liabilities are calculated. It then runs through each of the members showing the value of the liabilities for the member and the total scheme and FAS entitlement. These amounts are then aggregated for the scheme.

3. Then the scheme is analysed based on four funding scenarios. In the first scenario, pensioners get most of their benefits covered but deferred members are only partly covered. In the second scenario, pensioners get all of their benefits and deferred members would have got scheme benefits close to the level of standard assistance. In the last two scenarios, the scheme is extremely poorly funded; there are no scheme overpayments in the third scenario, but significant overpayments in the fourth.

4. The second set of examples uses a different scheme in order to demonstrate how the process will be different for schemes that have not yet equalised in respect of Guaranteed Minimum Pensions (GMPs).

5. Please note that figures may not add up exactly due to rounding.

Example Scheme 1

6. All the examples in the first part are based on a single (very small) scheme which started wind-up on 1 January 2001 with an insolvent employer. Its Commencement Date is therefore 1 January 2001 and, in this case, the crystallisation date is also 1 January 2001. The calculation date of the valuation is 31 December 2010. The scheme does not have any money purchase assets or liabilities.

7. There were only seven members in the scheme when it started to wind-up, but they reflect a typical profile of pensioners and deferred members. Two died during the wind-up process, one of whom left a widow. As set out in the Asset Share guidance, the two deceased members are included in the calculation.

8. The scheme pays indexation on all service, and dependant's pensions are 50 per cent of the member's pension. The statutory priority order for this scheme,

and the basis on which it is calculated (the Minimum Funding Requirement (MFR)), is shown in the table below. This over-rides the scheme priority order which allocates assets first to pensioners and then to deferred members. Members are classified in the scheme priority order as pensioners or deferred members in the same way as the statutory priority order does. Under the scheme priority order rules, the liabilities are calculated using a buy-out basis.

	Liability	**Basis**
a	Any liability for pensions or other benefits which, in the opinion of the trustees, are derived from the payment by any member of the scheme of voluntary contributions.	MFR
aa	Where – (i) the trustees or managers of the scheme are entitled to benefits under a contract of insurance which was entered into before 6th April 1997 with a view to securing the whole or part of the scheme's liability for any pension or other benefit payable in respect of one particular person whose entitlement to payment of a pension or other benefit has arisen and for any benefit which will be payable in respect of that person on his death, and (ii) either that contract may not be surrendered or the amount payable on surrender does not exceed the liability secured by the contract (but excluding liability for increases to pensions), the liability so secured.	MFR
b	In a case not falling within (aa), where a person's entitlement to payment of pension or other benefit has arisen, liability for that pension or benefit and for any pension or other benefit which will be payable in respect of that person on his death (but excluding increases to pensions)	MFR
c	Any liability – (i) for equivalent pension benefits (within the meaning of section 57(1) of the National Insurance Act 1965), guaranteed minimum pensions, protected rights, section 9(2B) rights (within the meaning of regulation 1(2) of the Contracting-out (Transfer and Transfer Payment) Regulations 1996), or safeguarded rights (within the meaning of section 68A(1) of the Pension Schemes Act 1993) (but excluding increases to pensions), or (ii) in respect of members with less than two years pensionable service who are not entitled to accrued rights under the scheme, for the return of contributions.	MFR
d	Any liability for increases to pensions referred to in (aa) and (b).	MFR
e	Any liability for increases to pensions referred to in (c).	MFR
f	So far as not included in (c) or (e), any liability for – (i) pensions or other benefits which have accrued to or in respect of any members of the scheme (including increases to pensions), or (ii) future pensions or other future benefits, directly or indirectly attributable to pension credits (including increases to pensions).	MFR

9. There is provision in the winding-up regulations for the actuary to adjust liabilities in priority classes (aa) and (b). For the purpose of these examples, no such adjustment is made by the actuary.

Scheme 1 Member details

10. The calculations of liabilities can be carried out before or after assessment of the scheme assets. In these examples, most of the member calculations are the same, so it is more convenient to carry them out first. As described in section 3, paragraphs 4 and 5 of the Asset Share guidance, the liabilities for the members are calculated split by priority class as are payments that would have been made to the member had the scheme been fully funded. In practice, it is not necessary to calculate liabilities which have no asset coverage. For the purposes of these examples, however, all liabilities are calculated.

Member 1 – relatively young pensioner aged 65 at start of wind-up and 75 now

11. **Liability for future payments**

Priority Class	**Liability for purposes of calculating statutory asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
aa) Pensions in payment secured by insurance policies	nil	nil
b) Pensions in payment excluding increases	31,862	39,480
d) Increases on pensions in payment	18,674	26,768
Total liability	50,536	66,248

12. **Past Entitlement**

	Rate at end of wind-up (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 - 13/5/2004	14/5/2004 – 31/12/2010	Total
Scheme pension excluding increases	3,000	10,000	20,000	30,000
Increases on scheme pension	781	223	3,440	3,663
Total Scheme pension	3,781	10,223	23,440	33,663

13. Past entitlement is entitlement if scheme paid 100 per cent of benefits.

14. The Adjusted Liabilities can then be calculated for each member as described in section 3, paragraph 6 of the Asset Share guidance. The table below first shows non-zero statutory priority classes for this member, and continues on to show the priority classes that are effective if assets are sufficient to cover all the

statutory priority classes. The remaining scheme priority order liabilities are the difference between the buy-out liability and the statutory priority order liability.

15. **Adjusted Liabilities**

Priority Class		**(£)**
Statutory Priority classes		
	b) Pensions in payment excluding increases	61,862
	d) Increases on pensions in payment	22,337
Total statutory priority order adjusted liability		**84,199**
Remaining scheme priority order classes		
	Pensioners	15,712
Grand Total adjusted liability		**99,911**

Member 2 – elderly pensioner aged 75 at start of wind-up and 85 now

16. **Liability for future payments**

Priority Class	**Liability for purposes of calculating statutory asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
aa) Pensions in payment secured by insurance policies	nil	nil
b) Pensions in payment excluding increases	46,159	50,520
d) Increases on pensions in payment	22,711	31,927
Total liability	68,870	82,447

17. **Past Entitlement**

	Rate at end of wind-up (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 - 13/5/2004	14/5/2004 – 31/12/2010	Total
Scheme pension excluding increases	6,000	20,000	40,000	60,000
Increases on scheme pension	1,561	446	6,880	7,326
Total Scheme pension	7,561	20,446	46,880	67,326

18. Past entitlement is entitlement if scheme paid 100 per cent of benefits.

19. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
b) Pensions in payment excluding increases	106,159
d) Increases on pensions in payment	30,037
Total statutory priority order adjusted liability	136,196
Remaining scheme priority order classes	
Pensioners	13,577
Grand Total adjusted liability	149,773

Member 3a – pensioner died at the end of 2005 – no spouse

20. **Liability for future payments**

Priority Class	**Liability for purposes of calculating statutory asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
aa) Pensions in payment secured by insurance policies	nil	nil
b) Pensions in payment excluding increases	nil	nil
d) Increases on pensions in payment	nil	nil
Total liability	nil	nil

21. **Past Entitlement**

	Rate at date of death (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 - 13/5/2004	14/5/2004 – 31/12/2010	Total
Scheme pension excluding increases	3,000	10,000	5,000	15,000
Increases on scheme pension	279	223	405	628
Total Scheme pension	3,279	10,223	5,405	15,628

22. Past entitlement is entitlement if scheme paid 100 per cent of benefits.

23. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
b) Pensions in payment excluding increases	15,000
d) Increases on pensions in payment	628
Total statutory priority order adjusted liability	**15,628**
Grand Total adjusted liability	**15,628**

Member 3b – pensioner age 75 at start of wind-up died at the end of 2005 – left widow of same age

24. **Liability for future payments**

Priority Class	**Liability for purposes of calculating statutory asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
aa) Pensions in payment secured by insurance policies	nil	nil
b) Pensions in payment excluding increases	nil	nil
d) Increases on pensions in payment	nil	nil
Total liability	nil	nil

25. **Past Entitlement**

	Rate at date of death (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 - 13/5/2004	14/5/2004 – 31/12/2010	Total
Scheme pension excluding increases	3,000	10,000	5,000	15,000
Increases on scheme pension	279	223	405	628
Total Scheme pension	3,279	10,223	5,405	15,628

26. Past entitlement is entitlement if scheme paid 100 per cent of benefits.

27. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
b) Pensions in payment excluding increases	15,000
d) Increases on pensions in payment	628
Total statutory priority order adjusted liability	**15,628**
Grand Total adjusted liability	**15,628**

Member 3c – Widow of member 3b. Same age as member 3b and widowed at the end of 2005.

28. **Liability for future payments**

Priority Class	**Liability for purposes of calculating statutory asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
aa) Pensions in payment secured by insurance policies	nil	nil
b) Pensions in payment excluding increases	11,080	11,835
d) Increases on pensions in payment	5,350	7,529
Total liability	16,430	19,364

29. **Past Entitlement**

	Rate at end of wind-up (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 - 13/5/2004	14/5/2004 – 31/12/2010	Total
Scheme pension excluding increases	1,500	nil	7,500	7,500
Increases on scheme pension	390	nil	1,517	1,517
Total Scheme pension	1,890	nil	9,017	9,017

30. Past entitlement is entitlement if scheme paid 100 per cent of benefits.

31. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
b) Pensions in payment excluding increases	18,580
d) Increases on pensions in payment	6,867
Total statutory priority order adjusted liability	**25,447**
Remaining scheme priority order classes	
Pensioners	2,934
Grand Total adjusted liability	**28,381**

Member 4 – Young deferred member aged 40 at start of wind-up, age 50 now

32. **Liability for future payments**

Priority Class	**Liability for purposes of calculating asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	10,061	43,890
e) Increases on (deferred) contracted-out liabilities	2,871	19,740
f) Other liabilities (i.e. non contracted-out deferred benefits)	8,621	42,420
Total liability	21,553	106,050

33. **Past Entitlement**

	Rate at end of wind-up (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 - 13/5/2004	14/5/2004 – 31/12/2010	Total
a) AVCs	nil	nil	nil	nil
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	3,000	nil	nil	nil
e) Increases on (deferred) contracted-out liabilities	nil	nil	nil	nil
f) Other liabilities (i.e. non contracted-out deferred benefits)	2,000	nil	nil	nil
Total Scheme pension	5,000	nil	nil	nil

34. Past entitlement is entitlement if scheme paid 100 per cent of benefits. The rate at end of wind-up is the rate revalued up to the calculation date.

35. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	10,061
e) Increases on (deferred) contracted-out liabilities	2,871
f) Other liabilities (i.e. non contracted-out deferred benefits)	8,621
Total statutory priority order adjusted liability	**21,553**
Remaining scheme priority order classes	
Deferred members	84,497
Grand Total adjusted liability	**106,050**

Member 5 – Deferred member retires at Scheme Normal Pension Age during wind-up aged 60 at start of wind-up, age 70 now

36. **Liability for future payments**

Priority Class	**Liability for purposes of calculating asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	5,031	22,980
e) Increases on (deferred) contracted-out liabilities	2,424	13,555
f) Other liabilities (i.e. non contracted-out deferred benefits)	2,485	12,178
Total liability	9,940	48,713

37. **Past Entitlement**

	Rate at end of wind-up (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 - 13/5/2004	14/5/2004 – 31/12/2010	Total
a) AVCs	nil	nil	nil	nil
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	1,500	nil	9,000	9,000
e) Increases on (deferred) contracted-out liabilities	229	nil	750	750
f) Other liabilities (i.e. non contracted-out deferred benefits)	576	nil	3,250	3,250
Total Scheme pension	2,306	nil	13,001	13,001

38. Past entitlement is entitlement if scheme paid 100 per cent of benefits.

39. Members are permitted by the scheme to commute pension at retirement for a lump sum. The scheme commutation terms allow a lump sum of £12 for each £1 given up. This member's maximum lump sum at retirement is £6,000, and their full pre-commutation pension is £2,000 a year. The pension remaining after taking the maximum lump sum would be £1,500 a year, or 75% of the full pension. As specified in the valuation guidance, the liabilities are unaffected by whether the member has commuted or not.

40. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	14,031
e) Increases on (deferred) contracted-out liabilities	3,174
f) Other liabilities (i.e. non contracted-out deferred benefits)	5,735
Total statutory priority order adjusted liability	**22,940**
Remaining scheme priority order classes	
Deferred members	38,773
Grand Total adjusted liability	**61,713**

41. The non-contracted-out deferred benefits are split into flat pension and increases here to ease the calculation of Notional Annuities.

Member 6 – Young Deferred member aged 40 at start of wind-up

42. **Liability for future payments**

Priority Class	**Liability for purposes of calculating asset share (£)**	**Buy-out liability (£)**
a) AVCs	nil	nil
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	10,061	43,890
e) Increases on (deferred) contracted-out liabilities	2,871	19,740
f) Other liabilities (i.e. non contracted-out deferred benefits)	8,621	42,420
Total liability	21,553	106,050

43. **Past Entitlement**

	Rate at end of wind-up (£ pa)	**Total amount, without interest (£)**		
		1/1/2001 – 13/5/2004	14/5/2004 – 31/12/2010	Total
a) AVCs	nil	nil	nil	nil
c) (Deferred) contracted-out liabilities excluding increases and returns of	3,000	nil	nil	nil

contributions				
e) Increases on (deferred) contracted-out liabilities	nil	nil	nil	nil
f) Other liabilities (i.e. non contracted-out deferred benefits)	2,000	nil	nil	nil
Total Scheme pension	5,000	nil	nil	nil

44. Past entitlement is entitlement if scheme paid 100 per cent of benefits. The rate at end of wind-up is the rate revalued up to the calculation date.

45. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	10,061
e) Increases on (deferred) contracted-out liabilities	2,871
f) Other liabilities (i.e. non contracted-out deferred benefits)	8,621
Total statutory priority order adjusted liability	**21,553**
Remaining scheme priority order classes	
Deferred members	84,497
Grand Total adjusted liability	**106,050**

46. Note: this member is identical to member 4.

47. Once the Adjusted Liabilities for individual members are calculated, the actuary then sums them over each priority class as required by section 3, paragraph 7, of the Asset Share guidance. The liabilities calculated at that date, split into the statutory priority classes required for insolvent wind-ups that commenced from 6 April 1997 to 9 May 2004 are:

48. **Adjusted Liabilities**

Priority Class	**(£)**
Statutory Priority classes	
b) Pensions in payment excluding increases	216,601
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	34,153
d) Increases on pensions in payment	60,498
e) Increases on (deferred) contracted-out liabilities	8,916
f) Other liabilities (i.e. non contracted-out deferred benefits)	22,978
Total statutory priority order adjusted liability	**343,145**
Remaining scheme priority order classes	
Pensioners	32,223
Deferred members	207,768
Total remaining scheme priority order classes	**239,991**
Grand Total adjusted liability	**583,137**

49. This is the priority order in force for wind-ups commencing 6 April 1997 to 9 May 2004 inclusive. Wind-up commenced before 19 March 2002, so the MFR liability is used for calculating all of the statutory priority classes.

50. Expenses to be incurred in transferring assets to FAS will be £20,000.

51. For completeness, the total unadjusted liabilities and amounts due are shown in the following table:

52. **Future payments**

Priority Class	**Liability for purposes of calculating asset share (£)**	**Buy-out liability (£)**	**Total amount, without interest 1/1/2001-31/12/2010 (£)**
a) AVCs	nil	nil	nil
aa) Pensions in payment secured by insurance policies	nil	nil	nil
b) Pensions in payment excluding increases	89,101	101,835	127,500
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	25,153	110,760	9,000
d) Increases on pensions in payment	46,735	66,224	13,763
e) Increases on (deferred) contracted-out liabilities	8,166	53,036	750
f) Other liabilities (i.e. non contracted-out deferred benefits)	19,728	97,019	3,250
Total liability	188,882	428,873	154,263

Scheme 1 Scenario 1 – Poorly funded (assets £190,000) – scheme cut back benefits below expected funding level

53. In this case, the scheme actuary estimated that the assets would be used up in the priority class of d) increases on pensions in payment. The trustees therefore decided to cut back by not paying any increases and when a deferred pension came into payment only paying 50 per cent of the contracted-out part (since the assets allocated here are the MFR value, which is less than the buy-out value). The trustees also decided not to allow members who retired during wind-up to commute any of their pension for a lump sum. The total amount of interim pensions paid is therefore £132,000. (The interim payments received by each member are summarised at the table at the end of this scenario.) FAS initial payments commenced with effect from 14 May 2004. Pensioners did not receive any initial payments since the scheme was paying 100 per cent of

pensions excluding increases. Deferred members who have subsequently retired would have received some of their benefits in the form of initial payments.

54. When the Asset Share is calculated, the assets of the scheme are adjusted as described in paragraph section 4 paragraphs 2 to 3, to remove future expenses (£20,000) but to include the total amount of the interim payments actually made (i.e. £190,000 less £20,000 plus £132,000 equals £302,000). This figure is the Adjusted Assets. The liabilities are adjusted by summing liabilities for payments during wind-up and following the end of wind-up. The Adjusted Assets are allocated to the Adjusted Liabilities as described in section 3, paragraph 8, of the Asset Share guidance as follows (showing statutory priority classes only):

55. **Allocations**

Priority Class	**Adjusted Liabilities (£)**	**Allocated Adjusted Assets (£)**	**Proportion of priority class covered**
a) AVCs	nil	nil	N/A
aa) Pensions in payment secured by insurance policies	nil	nil	N/A
b) Pensions in payment excluding increases	216,601	216,601	100%
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	34,153	34,153	100%
d) Increases on pensions in payment	60,498	51,246	84.71%
e) Increases on (deferred) contracted-out liabilities	8,916	nil	0%
f) Other liabilities (i.e. non contracted-out deferred benefits)	22,978	nil	0%
Total liability	343,145	302,000	

56. Each member therefore has an Asset Share calculated according to section 3, paragraphs 10 to 13 of the Asset Share guidance of:

- Total amount of past entitlement to pensions in payment excluding increases plus
- MFR value of future entitlement to pensions in payment excluding increases plus
- Total amount of past entitlement to contracted-out liabilities plus
- MFR value of future entitlement to deferred contracted-out liabilities plus
- 84.71 per cent of total amount of past entitlement to increases of pensions in payment plus

- 84.71 per cent of MFR value of future entitlement to increases of pensions in payment **less**
- Total amount of actual interim payments received.

57. The sum of all these Asset Shares will be £170,000, the actual level of assets in the scheme less the £20,000 in expenses. Individual Asset Shares can now be calculated. The Asset Share will be positive or zero for all members since the trustees cut back benefits below the level afforded by the Asset Share.

Scenario 1 Member 1

58. Member 1 would have received £30,000 interim payments which would reflect all their pension excluding increases and so their Adjusted Asset Share will be:

    (£31,862 + £30,000) + 0.8471 x (£3,663 + £18,674) = £80,783

59. From this is deducted the interim payments received (£30,000) to get the Asset Share of **£50,783** (section 3, paragraph 13 of the Asset Share guidance).

Scenario 1 Member 4

60. The young deferred member will have an Asset Share of £10,061 equal to the MFR value of contracted-out rights excluding increases. There are no over or under payments.

61. The Asset Share will be used when calculating the maximum lump sum available to this member.

Scenario 1 Member 5

62. The deferred member who retired during wind-up received some scheme benefits. The trustees did not allow the member to commute any of their benefits for a lump sum. The Asset Share is equal to the MFR value of future contracted-out payments plus the total amount of previous contracted-out payments that would have been paid (each without increases) less interim payments actually received (50 per cent of £9,000).

    This is £9,000 + £5,031 - £4,500) = £9,531.

63. **In summary, asset shares are:**

Member	**Adjusted Asset Share = Annuitised Asset Share**	**Less interim payments**	**Asset Share**
1	80,783	30,000	50,783
2	131,602	60,000	71,602
3a	15,532	15,000	532
3b	15,532	15,000	532
3c	24,397	7,500	16,897

4	10,061	Nil	10,061
5	14,031	4,500	9,531
6	10,061	nil	10,061
Total	302,000	132,000	170,000

Scheme 1 Scenario 2 – Reasonably funded (assets £400,000) – scheme cut back benefits below expected funding level

64. In this case, the scheme actuary estimated that the assets would be sufficient to cover all the priority classes using the statutory basis, but would not be sufficient to cover the buy-out liability. The trustees therefore decided to cut back by paying half of increases on pensions in payment and when a deferred pension came into payment only paying 50% of deferred pensions and 50% of any increases on deferred pensions that came into payment. Trustees allowed members who retired during wind-up the option to take a lump sum up to a maximum of 25% of (total) pension. One member retired during wind-up (member 5) and they opted to commute the maximum. The remaining interim pension payments for this member were therefore 25% of full pre-commutation entitlement.

65. The total amount of interim pensions actually paid is therefore £143,632. FAS initial payments commenced with effect from 14 May 2004. Pensioners did not receive any initial payments from the FAS since the scheme was paying 100 per cent of pensions excluding increases. Deferred members who subsequently retired would have received some of their benefits in the form of FAS initial payments.

66. When the asset share is calculated, the assets used in the calculation are adjusted to exclude expenses but include the total amount of the interim payments actually made (i.e. £400,000 less £20,000 plus £143,632 equals £523,632). These adjusted assets are allocated in the statutory priority order as follows:

Priority Class	**Adjusted Liabilities (£)**	**Allocated Adjusted Assets (£)**	**Proportion of priority class covered**
a) AVCs	nil	nil	N/A
aa) Pensions in payment secured by insurance policies	nil	nil	N/A
b) Pensions in payment excluding increases	216,601	216,601	100%
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	34,153	34,153	100%
d) Increases on pensions in payment	60,498	60,498	100%
e) Increases on (deferred) contracted-out liabilities	8,916	8,916	100%
f) Other liabilities (i.e. non contracted-out deferred benefits)	22,978	22,978	100%
Total liability	343,145	343,145	

67. Although member 5 has exercised the option to commute, which they did not do in scenario 1, liabilities are the same as for scenario 1 since options are ignored in the calculation of liabilities.

68. There are still Adjusted Assets of £180,487 (£523,632 minus £343,145) left after this procedure. The trustees have to allocate these according to the scheme rules. In addition to this amount, it would require a further £59,505 to fund to buy-out levels, so the scheme will still be under funded at the end.

69. After this procedure, the allocation of the remaining assets is as follows:

70. **Allocations**

Priority Class	**Future buy-out liability less future statutory priority order liability(£)**	**Allocated Adjusted Assets (£)**	**Proportion of priority class covered**
1 Pensions	32,223	32,223	100%
2 Deferred members	207,768	148,264	71.360%
Total liability	239,991	180,487	

71. Therefore, all benefits for pensioners are covered up to buy-out. However, deferred members do not get a full scheme entitlement.

72. Each member therefore has an asset share of:

- Total amount of past entitlement to pensions in payment (b and d) plus
- Buy-out value of their future entitlement to pensions in payment (b, d and 3) plus
- Total amount of past entitlement to deferred pensions (c, e, f) plus
- MFR value of future entitlement to deferred pensions (c,e,f) plus
- 71.360 per cent of the difference between buy-out and MFR value of future entitlement to deferred pensions (4) **less**
- Total amount of actual interim payments received.

73. The sum of all these Asset Shares will be the Adjusted Assets of £380,000, the actual level of assets in the scheme less expenses. Individual Asset Shares can now be calculated. The Asset Share will be positive or zero for all members since the trustees cut back benefits below the level afforded by the Asset Share.

Scenario 2 Member 1

74. Member 1 would have received £31,832 interim payments which would reflect all their pension excluding increases and half of the increases so their Asset Share will be:

£39,480 + £26,768 + £30,000 + £3,663 - £31,832 = £68,079

(Note: the buy-out value of liabilities is used in the calculation now since it is based on scheme priority order.)

Scenario 2 Member 4

75. The young deferred member will have an Asset Share of:

    £21,553 + 0.71360 x (£106,050 - £21,553) = £81,850.

    There are no over- or under-payments. Note that the Asset Share is only sufficient to purchase 77.18 per cent of the buy-out value of all benefits (£106,050). The Asset Share will be used when calculating the maximum lump sum available to this member.

Scenario 2 Member 5

76. The deferred member who retired during wind-up and opted to commute the maximum of 25% for a lump sum. received £9,250 of scheme benefits (25 per cent of the full entitlement of £13,001 plus a lump sum of £6,000). The Adjusted Asset Share is equal to:

    £9,940 + £13,001 + 0.71360 x (£48,713 - £9,940) = £50,609

    and therefore the Asset Share is £50,609 - £9,250 = £41,359.

Scenario 3 – Extremely poorly funded (assets £15,000) – scheme cut back benefits below expected funding level

77. In this trivial case, the scheme actuary estimated that the scheme may not have sufficient assets to pay any benefits. The trustees therefore decided to stop paying any benefits until the wind-up was completed. FAS initial payments commenced on 14 May 2004.

78. When the Asset Share is calculated, the scheme has insufficient assets to pay its expenses. It gets money from FAS for the additional £5,000 required in order for it to transfer to FAS.

79. The Adjusted Assets for this scheme are minus £5,000. All members therefore have a nil Asset Share and a nil Annuitised Asset Share.

Scheme 1 Scenario 4 – Extremely poorly funded (assets £15,000) – scheme did not cut back benefits

80. In this case, the trustees decided not to cut back benefits. The trustees decided not to allow members who retired during wind-up to commute part of their pension for a lump sum. There were no FAS initial payments as a result.

81. The scheme does not have enough assets to pay the expenses of the wind-up. Therefore it gets a payment from FAS of the extra £5,000 required. Its assets are now £20,000. When the Asset Share is calculated, the assets used in the calculation are adjusted to include the total amount of the interim payments actually made (i.e. actual assets of £20,000 plus interim payments of £154,263 equals £174,263). (The interim payments received by each member are summarised at the table on the next page.) The expenses due (£20,000) and the FAS payment (£5,000) are deducted from this to give Adjusted Assets of £149,263.

82. These Adjusted Assets are allocated as follows:

83. **Allocations**

Priority Class	**Adjusted Liabilities (£)**	**Allocated Adjusted Assets (£)**	**Proportion of priority class covered**
a) AVCs	nil	nil	N/A
aa) Pensions in payment secured by insurance policies	nil	nil	N/A
b) Pensions in payment excluding increases	216,601	149,263	68.91%
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	34,153	nil	0%
d) Increases on pensions in payment	60,498	nil	0%
e) Increases on (deferred) contracted-out liabilities	8,916	nil	0%
f) Other liabilities (i.e. non contracted-out deferred benefits)	22,978	nil	0%
Total liability	343,145	149,263	

84. Each member therefore has an asset share of:

- 68.91 per cent of total amount of past entitlement to pensions in payment excluding increases plus
- 68.91 per cent of MFR value of future entitlement to pensions in payment excluding increases **less**
- Total amount of actual interim payments received by that member

85. The sum of all these Asset Shares will be -£5,000, which is the actual assets of £20,000 that the scheme now has, less the expenses to be incurred and less the FAS payment. Individual Asset Shares can now be calculated. At this stage, the Asset Share for each member could be positive, negative or zero.

86. In summary, asset shares are:

87. **Allocations**

Member	Adjusted Asset Share	Less interim payments	Asset Share
1	42,630	33,663	8,967
2	73,156	67,326	5,830
3a	10,337	15,628	-5,291
3b	10,337	15,628	-5, 291
3c	12,804	9,017	3,786
4	nil	nil	nil
5	nil	13,001	-13,001
6	nil	nil	nil
Total	149,263	154,263	-5,000

88. Initially, the Asset Shares for members 3a, 3b and 5 are negative. As described in the Asset Share guidance, FAS calculations will effectively allow for the overpayments made to members who are still alive at the calculation date to be recovered through deductions to future FAS payments and negative asset shares should be reported for such members. However, this is not possible for members who have died. Thus, the members who have died and have negative asset shares are excluded from the calculation which is then repeated. The Adjusted Assets are now the £123,007 of interim pensions paid to members 1 and 2 and 3c minus the £5,000 payment from FAS which leaves £118,007.

89. The allocation of assets is now as follows (excluding priority classes with nil coverage):

90. **Allocations**

Priority Class	Adjusted Liabilities (£)	Allocated Adjusted Assets (£)	Proportion of priority class covered
a) AVCs	nil	nil	100%
aa) Pensions in payment secured by insurance policies	nil	nil	100%
b) Pensions in payment excluding increases	186,601	118,007	63.24%

91. Asset shares are now:

Member	Adjusted asset share	Less interim payments	Asset share
1	39,122	33,663	5,459
2	67,135	67,326	-191
3a	excluded	excluded	nil
3b	excluded	excluded	nil
3c	11,750	9,018	2,732
4	nil	nil	nil
5	nil	13,001	-13,001

6	nil	nil	nil
Total	118,007	123,007	-5,000

Example Scheme 2 – Equalisation examples

92. These examples show how schemes can equalise the asset shares for members. This procedure is described in paragraphs 33 to 41 of section 2 and paragraph 9 of section 3 of the Asset Share guidance.

93. The following examples are based on a small scheme with a Normal Retirement Age of 65, with only four members. The examples are based on two scenarios; the first scenario is of a poorly funded scheme and the second scenario is of a reasonably funded scheme.

Scheme 2 Member details

94. The adjusted liabilities have not been split into past entitlement and future liabilities in these examples as this split is not necessary to demonstrate how equalisation will work.

Member 1 – a male deferred member aged 61 at the start of wind-up.

95. Note this member is a "Dubery" member when his opposite sex (female) liabilities are considered since if his benefits had been calculated on a female benefit structure, then he would have been entitled to receive the GMP component of his benefits at the start of wind-up.

96. This member's liabilities should always be calculated on a female basis as this always produces the higher adjusted liability when considering the aggregate liability up to and including each priority class. For instance, when considering class (c), it is compared to the aggregate male adjusted liability – nil in class (b) and £7,000 in class (c), so £7,000 total – against the aggregate female adjusted liability – £9,000 in class (b) and nil in class (c), so £9,000 in total. The female is the higher of these two amounts, so the female benefit structure would be used if assets were just sufficient to cover class (c). In fact, the result of this calculation is female for all priority classes so the female benefit structure should always be used for this member no matter what the funding position is.

97. **Member 1 Liabilities in each Priority Class**

Priority Class	**True Sex Adjusted Liability (£)**	**Opposite Sex Adjusted Liability (£)**	**Benefit structure which gives the highest adjusted liability up to and including this priority class**
b) Pensions in payment excluding increases	0	9,000	F (opposite)

c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	7,000	0	F (opposite)
d) Increases on pensions in payment	0	3,000	F (opposite)
e) Increases on (deferred) contracted-out liabilities	2,000	0	F (opposite)
f) Other liabilities (i.e. non contracted-out deferred benefits)	17,000	16,000	F (opposite)
Total Adjusted Liability	26,000	28,000	F (opposite)

Member 2 – a male deferred member aged 45 at the start of wind-up

98. This member has a GMP liability and total liability which is lower than the opposite-sex (female) liabilities.

99. This member's liabilities should always be calculated on a female basis as this always produces the higher adjusted liability.

100. **Member 2 Liabilities in each Priority Class**

Priority Class	**True Sex Adjusted Liability (£)**	**Opposite Sex Adjusted Liability (£)**	**Benefit structure which gives the highest adjusted liability up to and including this priority class**
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	2,500	3,500	F (opposite)
e) Increases on (deferred) contracted-out liabilities	700	1,000	F (opposite)
f) Other liabilities (i.e. non contracted-out deferred benefits)	10,000	9,000	F (opposite)
Total Adjusted Liability	13,200	13,500	F (opposite)

Member 3 – a male deferred member aged 40 at the start of wind-up

101. This member's GMP liability is lower than the opposite female liability, but the total male liability up to and including class (f) is higher. Therefore, if there are sufficient assets to reach priority class (f), then some further work will be required to determine the appropriate benefit structure; that is, whether the

benefit structure should be swapped in respect of this member. If assets do not reach priority class (f), then this member's adjusted liabilities should be calculated on a female basis.

102. **Member 3 Liabilities in each Priority Class**

Priority Class	True Sex Adjusted Liability (£)	Opposite Sex Adjusted Liability (£)	Benefit structure which gives the highest adjusted liability up to and including this priority class
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	4,000	4,500	F (opposite)
e) Increases on (deferred) contracted-out liabilities	1,000	1,200	F (opposite)
f) Other liabilities (i.e. non contracted-out deferred benefits)	12,500	11,000	M (true)
Total Adjusted Liability	17,500	16,700	M (true)

Member 4 – a female deferred member aged 50 at the start of wind-up

103. This member's GMP liability is lower than the opposite sex male liability, but the total female liability up to and including class (f) is higher. Therefore, if there are sufficient assets to reach priority class (f), then some further work will be required to determine the appropriate benefit structure. If assets do not reach priority class (f), then this member's adjusted liabilities should be calculated on a female basis.

104. **Member 4 Liabilities in each Priority Class**

Priority Class	True Sex Adjusted Liability (£)	Opposite Sex Adjusted Liability (£)	Benefit structure which gives the highest adjusted liability up to and including this priority class
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	14,500	13,500	F (true)
e) Increases on (deferred) contracted-out liabilities	4,000	3,000	F (true)
f) Other liabilities (i.e. non contracted-out deferred benefits)	22,000	25,000	M (opposite)
Total Adjusted Liability	40,500	41,500	M (opposite)

Scheme 2, Scenario 1 – Poorly funded (adjusted assets £37,500)

105. An initial benefit structure is chosen for each member as the gender which gives a higher adjusted liability in the top priority class. For all the above members the female basis gives the higher adjusted liability. However in some "real-life" cases where members work after age 60 the male GMP may give a higher adjusted liability in the top priority class, since females do not accrue GMP after age 60. [1]

106. The following table shows the total liability in each priority class on the initial gender basis and the percentage of each class covered by the pension fund's assets.

107. **Scheme liabilities in each Priority Class:**

Priority Class	Total Adjusted Liabilities (£)	Adjusted Assets allocated (£)	Proportion of priority class covered
b) Pensions in payment excluding increases	9,000	9,000	100.0%
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	22,500	22,500	100.0%
d) Increases on pensions in payment	3,000	3,000	100.0%
e) Increases on (deferred) contracted-out liabilities	6,200	3,000	48.4%
f) Other liabilities (i.e. non contracted-out deferred benefits)	58,000	0	0.0%
Total	98,700	37,500	

108. In this scenario there are sufficient assets to cover the first three priority classes, the assets run out in the increases on GMP priority class (e) and there are no assets to cover the excess priority class (f).

109. Members 1 and 2 are always better off using a female benefit basis so do not need any further consideration. Members 3 and 4 are more complex cases. Member 3 has a true sex (male) GMP liability (c) and increase on GMP liability (e) which is less than the opposite sex (female) liability. This is the member's top priority class and so the female basis is used to calculate this member's asset share. The male basis gives a higher liability in the excess priority class (f), but there aren't enough assets to cover this class.

110. Member 4 has a higher true sex (female) GMP liability (c) and (e) than the opposite sex (male) GMP liability and therefore this member's true sex (female) liability is used to calculate her asset share. As above the male basis gives a

[1] Strictly, accrual ceases on the 5 April before a woman's 60th birthday.

higher liability in the excess priority class (f) , but there aren't enough assets to cover this class.

111. For each member an asset share is calculated, by multiplying the percentage coverage by the liability in each class and summing this.

112. This table shows the asset share for each member:

	Asset Share (£)
Member 1	12,000
Member 2	3,984
Member 3	5,081
Member 4	16,435

113. The asset share is calculated on the female basis for all these members, as this gives the higher liability in the priority classes that have any asset coverage and therefore the female basis gives that member a higher asset share than if that member's liabilities were calculated on a male basis.

114. There are insufficient assets to cover the excess priority class so swapping the benefit structure does not need to be considered.

Scheme 2, Scenario 2 – Reasonably funded (adjusted assets £75,000)

115. The table below shows the total liability in each priority class on the initial gender basis (female for all four members) and the percentage of each class covered by the pension fund's assets.

116. **Scheme liabilities in each Priority Class – every member on Female benefits**

Priority Class	**Total Adjusted Liabilities (£)**	**Adjusted Assets allocated (£)**	**Proportion of priority class covered**
b) Pensions in payment excluding increases	9,000	9,000	100.0%
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	22,500	22,500	100.0%
d) Increases on pensions in payment	3,000	3,000	100.0%
e) Increases on (deferred) contracted-out liabilities	6,200	6,200	100.0%
f) Other liabilities (i.e. non contracted-out deferred benefits)	58,000	34,300	59.1%
Total	98,700	75,000	

117. In this scenario there are sufficient assets to cover the first four priority classes. Assets run out in the excess priority class (f) and here using the male liability could give a higher asset share for members 3 and 4, therefore swapping needs to be considered for these two members. Members 1 and 2 have a higher liability when they are calculated on the female basis so do not need to be considered for swapping-over.

118. To determine whether a swap in benefit structure is needed during the asset allocation process the following steps need to be taken:

STEP 1

119. Calculate a ratio of the difference between male and female liabilities in priority classes before the one that might need to be swapped (i.e. (a) to (e) here) over the difference between the female and male liabilities in the priority class that may need to be swapped (i.e. (f) in this example.

120. So in this example this is:

    (Male GMP liability - female GMP liability)

    / (Female excess liability - Male excess liability)

    For member 3 this is (£5,000 - £5,700) / (£11,000 - £12,500) = 46.7%

    For member 4 this is (£16,500 - £18,500) / (£22,000 - £25,000) = 66.7%

STEP 2

121. For each member that might need their benefit structure swapped, calculate the coverage in the last priority class if the benefit structure were swapped for that member and all those for whom the ratio in step one was lower than the ratio for the member being considered.

122. Member 3 has the lower ratio in step 1. If just member 3 was swapped to have a male benefit structure, then the funding level would be 58.8 per cent in priority class (f) as shown in the following table:

123. **Scheme liabilities in each Priority Class, with Member 3 on male benefits, others on female**

Priority Class	Total Adjusted Liabilities (£)	Adjusted Assets allocated (£)	Proportion of priority class covered
b) Pensions in payment excluding increases	9,000	9,000	100.0%
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	22,000	22,000	100.0%
d) Increases on pensions in payment	3,000	3,000	100.0%
e) Increases on (deferred) contracted-out liabilities	6,000	6,000	100.0%
f) Other liabilities (i.e. non contracted-out deferred benefits)	59,500	35,000	58.8%
Total	99,500	75,000	

124. If member 3 and member 4 were both swapped to the male benefit structure, then the funding level in priority class (f) would be 59.2 per cent as shown in the table below:

125. **Scheme liabilities in each Priority Class, with Members 3 and 4 on male benefits, members 1 and 2 on female**

Priority Class	Total Adjusted Liabilities (£)	Adjusted Assets allocated (£)	Proportion of priority class covered
b) Pensions in payment excluding increases	9,000	9,000	100.0%
c) (Deferred) contracted-out liabilities excluding increases and returns of contributions	21,000	21,000	100.0%
d) Increases on pensions in payment	3,000	3,000	100.0%
e) Increases on (deferred) contracted-out liabilities	5,000	5,000	100.0%
f) Other liabilities (i.e. non contracted-out deferred benefits)	62,500	37,000	59.2%
Total	100,500	75,000	

STEP 3

126. If the funding level calculated in step 2 is greater than the ratio for that member calculated in step 1 then, the benefit structure should be swapped over for that member.

127. Therefore the benefit structure for member 3 should be swapped from female to male (the funding level of 58.8 per cent exceeds the step 1 ratio of 46.7 per cent. However, the benefit structure for member 4 should not be swapped since the funding level of 59.2 per cent is lower than the ratio of 66.7 per cent.

128. The second of the three asset allocation tables above is the one that will apply. The Asset Shares can now be calculated as follows:

	Benefit structure used	**Asset Share (£)**
Member 1	F	21,412
Member 2	F	9,794
Member 3	M	12,353
Member 4	F	31,441

Testing that this combination of benefit structures meets the requirements

129. For the purpose of this example, a comparison can be made to the Asset Shares that would result if some other combinations of benefit structures were used. This will show that this combination of benefit structures achieves the aim which is that if the benefit structure is swapped for a single member, then that member would have a lower Asset Share than under the final combination.

130. The Asset Shares would be as follows if all members' liabilities were calculated on female benefit structure:

	Benefit structure used	**Asset Share (£)**
Member 1	F	21,462
Member 2	F	9,822
Member 3	F	12,205
Member 4	F	31,510

131. The only member whose benefit structure is different from the final combination is member 3, and the Asset Share after that change (£12,205) is lower than in the final Asset Share (£12,353).

132. If the benefit structure for both Member 3 and 4 were swapped then the Asset Share for each member is:

	Benefit structure used	**Asset Share (£)**
Member 1	F	21,472
Member 2	F	9,828
Member 3	M	12,400
Member 4	M	31,300

133. The only member whose benefit structure is different from the final combination of benefit structures is member 4. and the asset share after that change (£31,300) is lower than in the final asset share (£31,441). However, given that the total assets are fixed, the Asset Shares for other members are slightly higher.

134. However, given that the total assets are fixed, the Asset Shares for other members are slightly higher.

135. If either member 1 or member 2 were swapped onto the male benefit structure then that member's Asset Share would be lower since the liabilities on the female benefit basis are lower for those members.

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