MRC Pension Scheme: MRC Section
Statement of Funding Principles

Updated: 30 November 2017

Status

1. This Statement of Funding Principles was prepared by the Trustee on 30 November 2017 for the purposes of the actuarial valuation as at 31 December 2016, after obtaining the advice of the Scheme Actuary. It has been prepared in accordance with Section 223 of the Pensions Act 2004 and associated Regulations.

The statutory funding objective

2. The statutory funding objective is defined in section 222 of the Pensions Act 2004. Every scheme must have sufficient and appropriate assets to cover its technical provisions. This statement sets out the trustee's policy for ensuring that the statutory funding objective is met.

Funding objectives in addition to the statutory funding objective

3. An additional objective was set for the Scheme in 2013 and has been retained, with some modification, for the current valuation. The additional objective seeks to ensure that Scheme benefits should be secured during members' active service with the employers by regular contributions which are expected to increase gradually to the full cost of accrual over an appropriate period of time. For this valuation the additional funding objective explicitly incorporates an additional margin for prudence for accrued rights above that already allowed for within the assumptions adopted for the Statutory Funding Objective. The purpose being to limit the amount of past service surplus which may be considered available for offsetting the cost of future accrual. This is intended both to target contribution stability for the sponsor and to reflect the trustee's desire to further protect the members' accrued benefits in the event of unknown future events.

The technical provisions

4. The actuarial method to be used in the calculation of the technical provisions is the Projected Unit Method. The same method has also been used to calculate the Standard Contribution Rate (SCR) payable in respect of members' accruing benefits.

5. Full details of the assumptions used to calculate the technical provisions and the SCR are shown in the Annexes A and B attached. The employer[1] was consulted on these assumptions and has agreed to their adoption. The assumptions, when considered as a whole, have been set to be prudent.

[1] Under the terms by which other employers participate in the Scheme, MRC (the Principal Employer) is empowered to act on behalf of UK SBS Ltd and the Francis Crick Institute in all regards under Part 3 of the Pensions Act 2004.

Policy on discretionary increases and funding strategy

6. The Trustee has no powers to award discretionary benefits, except by the approval of the employer. No allowance for discretionary increases is included in the calculation of the technical provisions.

Employer Covenant

7. It is a requirement of the legislation and of the guidance issued by the Pensions Regulator that the Trustee should take into account the strength of the employers' covenant when determining appropriate financing for the scheme. The Trustee is satisfied that collectively the employers have a strong covenant, with a very low probability that the employers would be unable or unwilling to pay reasonable contributions.

Period within which and manner in which a failure to meet the statutory funding objective is to be rectified

8. The Trustee and the employer has agreed that any funding shortfalls identified at an actuarial valuation should be eliminated as quickly as the employers can reasonably afford by the payment of additional contributions, which would normally be expressed as a percentage of total Salary. In determining the actual recovery period for any particular recovery plan, the Trustee's principles are to take into account the following factors:

   - the size of the funding shortfall;
   - the business plans of the employers;
   - the Trustee's assessment of the financial covenant of the employers; and
   - any contingent security offered by the employers.

Arrangements by a person other than an employer or a scheme member to contribute to the scheme

9. There are no arrangements for a person other than the employers or members to contribute to the scheme.

Policy on reduction of cash equivalent transfer values (CETVs)

10. The Trustee will ask the actuary to advise them at each valuation of the extent to which the assets are sufficient to provide CETVs for all non-pensioners without adversely affecting the security of the benefits of other members and beneficiaries.

11. The Trustee is aware that, if coverage were to be less than 100%, they could reduce CETVs as permitted under legislation, after obtaining actuarial advice as to the appropriate extent. However, as the scheme is fully funded on the CETV basis, there is no policy on the reduction of CETVs currently in place.

Payments to employers

12. The Trust Deed of the scheme does not contain any provision for the payment of surplus monies to an employer, except on the winding up of the scheme.

Frequency of valuations and circumstances for extra valuations

13. The scheme's last actuarial valuation under Part 3 (Scheme Funding) of the Pensions Act 2004 was carried out as at the effective date of 31 December 2013. This valuation is the first since the scheme was sectionalised on 1 January 2014. Valuations will in normal circumstances be carried out every three years. An actuarial report on developments affecting the scheme's funding level will be obtained as at each intermediate anniversary of that date.

14. The Trustee may call for a full actuarial valuation instead of an interim actuarial report when, after considering the actuary's advice, they are of the opinion that events have made it unsafe to continue to rely on the results of the previous valuation as the basis for future contributions. The consent of the employer would be sought if an accelerated valuation was being proposed.

This statement has been agreed by the employers:
Signed on behalf of Medical Research Council to signify agreement

Signature: Hugh Dunlop

Name: HUGH DUNLOP

Position: Chief Operating & Finance Officer

Date: 7th December 2017

This statement was agreed by the Trustee:
Signed on behalf of the Trustee of the MRC Pension Scheme:

Signature: RLeigh

Name: REBECCA LEIGH

Position: TRUSTEE

Date: 7th December 2017

Signature: CWalker

Name: Carole WALKER

Position: Trustee

Date: 7th December 2017

Annex A to the Statement of Funding Principles for the MRCPS: MRC Section

Financial assumptions for determining the technical provisions

Actuarial valuation as at 31 December 2016

Value of Assets

1. The valuation of the scheme's assets is governed by Regulation 4 of The Occupational Pension Schemes (Scheme Funding) Regulations 2005 No 3377. This requires that the assets of the scheme held at the valuation date must be taken into account at the value shown in the annual accounts of the scheme. This is generally the market value (or fair value) of the assets.

2. The accumulated value of any Additional Voluntary Contributions (AVCs) made by members on a money-purchase basis is excluded from the value of the assets taken into account for the purposes of this valuation.

Discount rate (or, equivalently, the expected return on the assets)

3. The overall discount rate assumed for the valuation is derived from the expected rates of return on the assets assumed to be held by the scheme. The weightings applied to each of the different asset classes are as shown below and are consistent with the benchmark allocation of assets held by the scheme as at 31 December 2016.

	Benchmark allocation 31 December 2016
Growth assets	
• Equities (including alternatives)	65%
• Property	25%
Bonds	10%
Total	100%

4. At the 2013 valuation, the discount rate was based on the scheme's investment adviser's (Conduent) best estimate expectation of return from the assets, less a 1% pa margin for prudence on the growth assets. A further margin for prudence was incorporated at the 2013 valuation, by allowing for a 20% reallocation from 'growth' to lower returning assets compared to the benchmark allocation.

5. At the 2016 valuation, the margin for prudence on the growth assets has been reduced to 0.5% pa, and the assumed 20% reallocation to lower returning assets has been removed. This change is in light of the considerable reduction in the expected return from growth assets. The resulting discount rate strikes a balance between maintaining a long term coherent funding strategy whilst preserving appropriate margins for prudence. If future expected investment returns increase it would be the Trustee's intention to review and amend the margins for prudence, most likely to reinstate at the 2013 valuation levels. For the purposes of the additional funding objective an explicit reduction of 0.5% is made from the discount rate adopted for assessing the Statutory Funding Objective.

6. This approach to setting the discount rate based on expectations of return is inherently subjective, with judgment being exercised to determine the return expectation and the margin for prudence. The approach offers some scope for flexibility to smooth volatility at

future funding updates. However, the Trustee must be aware of any change in the degree of prudence implicit in exercising this flexibility, and the position of the Regulator.

7. The Scheme's non-growth assets are held principally in corporate and government bonds. At the 2013 valuation the return expected from these assets was derived from the yield on government bonds of 15 years' term. At the 2016 valuation, this has been aligned to actual investment strategy and is based on the average of government and corporate bond yields, with a 0.1% pa margin for prudence

8. The derivation of the discount rate as at 31 December 2016 is set out in the table below:

	Benchmark allocation	Best estimate return assumption	Prudent return assumption
Growth assets			
• Equities (including alternatives)	65%	5.95%	5.45%
• Property	25%	4.70%	4.20%
Bonds	10%	2.20%	2.10%
Total	100%		**4.8%**[1]

[1] See also paragraph 10. For the purposes of assessing the additional funding objective an explicit reduction of 0.5% is applied, thus a discount rate of 4.3% per annum is used for this purpose.

9. The 'strength' of the discount rate assumption refers to the margin over the risk free rate with a lower margin representing a stronger i.e. more prudent basis. The overall discount rate adopted (4.8%) is 3.1% in excess of gilt yields. This margin may be expected to vary at different valuation dates.

10. The additional funding objective seeks to add an explicit reserve into the scheme's technical provisions to recognise the Trustee's aim of further protecting the members' accrued benefits in the event of unknown future events. This reserve is determined by using a discount rate 0.5% lower than that for the statutory funding objective (4.3% a year at this valuation).

Price inflation

11. The Trustee has adopted the same method to derive the expected rate of price inflation as the 2013 valuation. This method uses the published Bank of England expectations of future RPI inflation for a suitable term. The rate of price inflation assumed for the long term has been set at 3.5% a year.

Pension increases

12. Increases to pensions in payment in the Scheme are (except for some increases to Guaranteed Minimum Pension benefits) in line with those announced by Government under the Pensions Increase Acts, and currently based on the Consumer Prices Index (CPI). An estimate of CPI is obtained by allowing for the expected difference in RPI and CPI measures of inflation. Based on the scheme actuary's advice the best estimate of the rate of CPI inflation is that over the long term it will be on average 1.15% a year lower than RPI inflation. Taking the same margin for prudence (0.25%) as for the previous valuation gives a prudent assumed differential of 0.9% for this valuation. The assumed rate of pension increases adopted for the 2016 valuation is therefore 2.6%.

Pay Increases

13. The benefits accruing during service are linked to increases in members' pay, and it is therefore necessary to consider what increases in future pay levels might reasonably be anticipated. Salary inflation has been assumed to be 1.5% pa in excess of consumer price inflation i.e. 4.1% pa. This assumption is for general pay inflation only and is exclusive of any allowance for promotional increases.

14. In addition to general increases in pay, the scheme experience indicates some increase in pay levels by age and/seniority. Accordingly, the age-related salary scales illustrated in the table below have also been incorporated into members' projected salaries. These scales are the same as adopted for the 2013 valuation.

Assumed rates of promotional pay progression of active members
(based on an index of 100 at age 20.)

Age Nearest	Men	Women
20	100	100
25	128	136
30	157	169
35	185	198
40	207	221
45	228	244
50	247	258
55	263	267

Summary of financial assumptions for the actuarial valuation as at 31 December 2016

15. A summary of the financial assumptions for the actuarial valuation of the MRC section of the MRCPS as at 31 December 2016 is given in the table below. The corresponding assumptions made for the previous valuation at 31 December 2013 are also shown for comparison.

For valuing liabilities	31 December 2016 % pa	31 December 2013 % pa
Discount rate	4.8 (SFO) 4.3 (AFO)	5.6
Retail Price Inflation	3.5	3.5
Consumer Price Inflation	2.6	2.6
Pension increases	2.6	2.6
(General) pay Increases	4.1	4.1
Discount rate net of pension increases	2.2 (SFO) 1.7 (AFO)	3.0
Discount rate net of pay inflation	0.7	1.5

1. The same assumptions are used for calculating the Standard Contribution Rate.
2. Assets are taken at their fair market value on the valuation date.

Annex B to the Statement of Funding Principles for the MRCPS: MRC section

Demographic assumptions for determining the technical provisions

Actuarial valuation as at 31 December 2016

Mortality in retirement

1. **Base tables** Mortality assumptions are to be based on the Actuarial Profession's Continuous Mortality Investigation 'S2 series' mortality tables: i.e. S2NXA on a year of use basis. Consistent with recent scheme experience, a minus one year age rating is applied, or in other words members are assumed to experience the mortality of someone one year younger than they actually are. The same tables, with a minus one year age adjustment, have been adopted for both normal and ill-health retirements. The 2013 valuation used the 'S1 series' mortality tables with no age rating adjustment.

2. The S2 dependant tables are used for current and future dependants of male members. The S2 member tables are used for male dependants as there are no corresponding dependant tables.

3. **Future mortality improvements** Future improvements in mortality are assumed to be in line with the improvements underlying the projections of future mortality rates in the 2014-based national population projections for the United Kingdom. These projections are carried out by the Office for National Statistics (ONS), usually every second year. The 2012 ONS projection basis was used for the 2013 valuation. Further details of these projections are available on the ONS website[2].

4. Illustrative life expectancies of current and future pensioners are summarised in the tables below. This demonstrates that the change in basis represents a strengthening of the mortality basis relative to the assumption made in 2013.

Remaining expectation of life - Current Pensioners

	31 December 2016	31 December 2013
Male 60	29.7 years	28.2 years
Male 65	24.7 years	23.3 years
Female 60	31.4 years	30.7 years
Female 65	26.4 years	25.8 years

Remaining expectation of life - Future Pensioners

	31 December 2016		31 December 2013
	(current age 51*)	(current age 40)	(current age 40)
Male 60	30.7 years	31.9 years	30.5 years
Male 65	26.2 years	27.3 years	26.0 years
Female 60	32.3 years	33.5 years	33.0 years
Female 65	27.8 years	28.9 years	28.5 years

*liability weighted age of current active members

[2] https://www.gov.uk/government/statistics/announcements

New entrants

5. No allowance has been made for new entrants for the calculation of technical provisions.

Age Retirement

6. The Normal Retirement Age (NRA) is 65 for all Scientific Staff, for all new entrants since 1997, and for those Non-Scientific Staff in post at that date who opted to switch from an NRA of 60.

7. All members are assumed to retire at their Normal Retirement Age.

Commutation

8. The benefits provided by the Scheme include an explicit lump sum, equal to three times the initial pension. No allowance has been made for the possibility of commuting some pension for an additional cash lump sum at retirement.

Leaving service

9. Members may leave service by voluntary withdrawal, on death in service, by ill-health retirement, as well as by normal retirement (see paragraphs 6 and 7 above). The assumed proportions of male and female members who leave service by the first three routes at different ages are illustrated in Tables 1 and 2 below. These assumptions are based on the experience of the MRCPS and similar larger schemes.

Table 1. Assumed number of exits of active members per 10,000 members - Males

Age Nearest	Withdrawal	Death in service	Ill-health retirement
20	975	3	2
25	810	3	2
30	705	4	2
35	540	5	3
40	360	8	4
45	210	13	6
50	105	24	13
55	30	37	31

Table 2. Assumed number of exits of active members per 10,000 members - Females

Age Nearest	Withdrawal	Death in service	Ill-health retirement
20	4949	2	2
25	4599	2	3
30	2969	3	4
35	1394	4	6
40	629	6	7
45	338	9	9
50	225	14	20
55	113	19	40

Age difference of dependants

10. It is assumed that male members are three years older than their dependants at all ages, whilst female members are two years younger than their dependants at all ages. These are broadly similar to the age specific rates used for the 2013 valuation.

Percentage with dependants' benefits at death

11. Contingent benefits, payable on members' deaths, are payable to spouses, civil partners, and some other dependants. For valuation purposes, it is assumed that a proportion of scheme members who die will have a spouse of the opposite sex. Benefits payable to other groups are allowed for implicitly. The following table gives illustrative figures for the proportions of members who are assumed to give rise to a dependant's pension on their death. These rates are the same as assumed for the 2013 valuation.

Exact Age	Male	Female
20	10%	22%
30	70%	82%
40	90%	89%
50	99%	89%
60	100%	83%
70	94%	70%
80	71%	42%

Expenses

12. An explicit allowance of 1.6% of Salary has been added to the contribution rate to allow for the administrative expenses of running the scheme and to cover the PPF levy.