MFR Conversion Appendix

Summary

This is the MFR Conversion Appendix to the Board's Determination under Section 175(5) of the Act in respect of the 2018/19 Levy Year. It sets out the methodology for adapting MFR valuations to estimate liabilities on a Section 179 basis for the purpose of calculating the Levies in respect of the 2018/19 Levy Year where no Section 179 Valuation has been provided by the statutory deadline but the Board has an MFR Valuation in respect of the Scheme.

This Appendix sets out the formulae developed by the Board to calculate valuation results on smoothed and stressed Section 179 bases as at 31 March 2018 (the "Output Date") in such cases.

1   Background

1.1   This Appendix applies if:
   (1)   no Section 179 Valuation has been received in respect of a Scheme by 31 March 2018 but
   (2)   a valuation on an MFR basis has previously been provided and has been used in the calculation of the Levies for the 2007/08 Levy Year.

1.2   A model was created for the 2007/08 Levy Year in conjunction with the Government Actuary's Department which enabled the Board to adapt and transform valuation results on the MFR basis to produce Section 179 results valid at the chosen output date.   In the 2007/08 Levy Year this model provided estimated Section 179 figures as at 31 October 2006 which were used in the calculation of the 2007/08 levy for schemes which had not submitted a Section 179 Valuation at that time.   These results formed the inputs for the calculation of the estimated Section 179 results for all levy years subsequent to 2007/08 and will form the inputs for the calculation of the estimated Section 179 results as at 31 March 2018 for the 2018/19 Levy Year.

2   Summary of the calculation

2.1   For those with a broad interest in the conversion methodology, the main stages of the calculations are summarised below.

2.2   The estimated Section 179 results that were used for the 2007/08 levy invoice calculation will be rolled forward, in the manner described in the Transformation Appendix, from 31 October 2006 to the Output Date.

2.3   The estimated value of assets thus derived as at 31 March 2018 will be reduced by 5% a year compound in respect of the period (measured in years and proportions of years) between the effective date of the MFR Valuation used in the calculation of the 2007/08 levy for the Scheme and the Output Date.

3 Summary of outputs from and inputs to the formulae

3.1 Outputs

• Effective date of the asset and liability valuations required for output (31 March 2018)	OutputDate
• Smoothed and stressed asset value	S179Ass
• Smoothed and stressed total liabilities (including section 179 expense allowance)	S179TL

3.2 Inputs

The estimated Section 179 Valuation results as at 31 October 2006, calculated as part of the 2007/08 levy invoice calculation:

• Assets for Section 179 Valuation purposes	S179InputAss
• Date of asset figure (31 October 2006)	RelAcDate
• Total value of Protected Liabilities	S179InputTL
• Liabilities for pensions in payment	S179InputPL
• Liabilities for deferred members	S179InputDL
• Liabilities for active members	S179InputAL
• Estimated costs of windup (excluding benefit installation/payment)	S179InputWUExp
• Estimated expenses of benefit installation/payment	S179InputPayExp
• Proportion of pensioner liabilities, excluding expenses, relating to service before 6 April 1997 (the default value as described in section 5 of the Transformation Appendix will be used)	S179InputPPre97Ppn
• Proportion of deferred pensioner liabilities, excluding expenses, relating to service before 6 April 1997 (the default value as described in section 5 of the Transformation Appendix will be used)	S179InputDPre97Ppn
• Proportion of deferred pensioner liabilities, excluding expenses, relating to service between 6 April 1997 and 5 April 2009 (the default value as described in section 5 of the Transformation Appendix will be used)	S179InputD97_09Ppn
• Proportion of active member liabilities, excluding expenses, relating to service before 6 April 1997 (the default value as described in section 5 of the Transformation Appendix will be used)	S179InputAPre97Ppn
• Proportion of active member liabilities, excluding expenses, relating to service between 6 April 1997 and 5 April 2009 (the default value as described in section 5 of the Transformation Appendix will be used)	S179InputA97_09Ppn
• Proportion of assets held in the form of insurance contracts not included in scheme accounts	S179InputInsPpn

• External liabilities	S179InputExLiab
• Effective date of the Section 179 Valuation (31 October 2006)	S179InputDate
• Version number of Section 179 assumptions used for this valuation (A3)	S179InputAssVNo
• Effective date of the MFR Valuation used in the 2007/08 levy invoice calculation for the Scheme	MFRDate

Scheme asset information Submitted as at the Measurement Time – percentages of the total assets as at the date of the last audited financial statement (referred to as "AssetDate" below). The value of assets at AssetDate is not Submitted; however it is anticipated that AssetDate will be considerably more up to date than the S179InputDate and the RelAcDate identified above (i.e. 31 October 2006):

• Bonds	Bo%
• Proportion of bonds which are fixed interest government bonds	Go%
• Proportion of bonds which are fixed interest non-government bonds	NG%
• Proportion of bonds which are inflation-linked bonds	IL%
• Equities	Eq%
• Proportion of equities which are UK quoted equities	UK%
• Proportion of equities which are overseas quoted equities	OS%
• Proportion of equities which are unquoted equities/private equity	PE%
• Property	Pr%
• Insurance policies	IP%
• Deferred or immediate fully insured annuities	An%
• Hedge funds	He%
• Cash and net current assets	Ca%
• Commodities	Co%
• ABC Arrangement	ABC%
• Other	Ot%
• Date of asset breakdown	AssetDate

Schemes with s179 protected liabilities of £1.5 billion or more are required to carry out a bespoke stress analysis on their asset allocation and to Submit the results by the Measurement Time. Other schemes have the option to Submit a bespoke stress analysis on a voluntary basis. Such calculations should be carried out as at the date of the most recently audited scheme accounts (i.e. the "AssetDate" above) and with reference to the Investment Risk Appendix and the Investment Risk Guidance.

• Stressed value of assets calculated from bespoke stress analysis as at date of the most recently audited scheme accounts [1]	BespokeStr
• Unstressed value of assets as at date of the most recently audited scheme accounts[2]	BespokeUnStr

For schemes with an ABC Arrangement, Part A of the Rules sets out the value of the ABC Arrangement that will be removed from the assets prior to calculating underfunding, the "s179 ABC Amount". For the avoidance of doubt, where the Board is satisfied that no value has been attributed to an ABC Arrangement in the assets used for the Section 179 or MFR Valuation that is used under Rule D2 or, in a case to which Parts F1-F3 of the Rules apply, the relevant Post-Transfer Valuation (whether because the ABC Arrangement was entered into after the effective date of the relevant valuation or otherwise), the s179ABCAmount shall be zero.

• s179 ABC Amount, as defined in Part A of the Rules	s179ABCAmount

Numbers of members with defined benefits only or partial defined benefits from the relevant Scheme Return data

• Pensioner members	PMemNo
• Deferred members	DMemNo
• Active members	AMemNo
• Total membership number	TotMemNo

Average ages of different classes of members from the relevant Scheme Return data

• Pensioner members	PAvAge
• Deferred members	DAvAge
• Active members	AAvAge

Normal Pension Age data taken from the Scheme Return data

• Normal Pension Age in respect of pre-6 April 1997 benefits	NPAPre97
• Normal Pension Age in respect of benefits accrued between 6 April 1997 and 5 April 2009	NPA97_09
• Normal Pension Age in respect of post-5 April 2009 benefits	NPAPost09

Where any of the information in this section 3 has not been provided (or is not in the form that the Board requires), the Board will need to assume a value. Details of the assumptions that will be made in these circumstances are set out in section 5 of the Transformation Appendix. Note also that average ages falling outside particular

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[1] Updated on 1 March 2018
[2] Updated on 1 March 2018

ranges will be subject to adjustment (see section 5 of the Transformation Appendix for details).

4 The formulae

4.1 Initial roll forward

The inputs set out in section 3.2 of this Appendix are used to roll forward the estimated Section 179 Valuation result to 31 March 2018 (OutputDate) in accordance with the formulae as detailed in the Transformation Appendix.

4.2 Asset adjustment

The asset value at OutputDate (S179Ass) is then adjusted
S179Ass = S179Ass [as calculated in accordance with sections 4.7 and 4.8 of the Transformation Appendix]
$$x\ 0.95^{(OutputDate - MFRDate)}$$

The time period OutputDate – MFRDate is measured in years and proportions of years.