



UK Atomic Energy Authority Pension Schemes

Allocation of pension Factors and guidance





UKAEA Actuarial Factors

Factors for allocation of pension

Contents

1	Introduction	1			
2	Instructions	3			
3	Example	5			
4	Limitations of this guidance	6			
Аp	pendix A: Factor tables	7			
Appendix B: Assumptions underlying the factors					



1 Introduction

- 1.1 This note is provided for the United Kingdom Atomic Energy Authority ("the Authority") as scheme manager of the Combined Pension Scheme and the Principal Non-Industrial Superannuation Scheme ("the Schemes").
- 1.2 This document sets out the actuarial guidance on the calculation of the additional dependant benefit which is created when members choose to allocate part of their annual pension to a dependant, under 'Option A' of Rule 4.17 of the Schemes' rules.
- 1.3 Appendix B sets out the factors required for determining benefits when members choose to allocate part of their annual pension to increase or provide a benefit for a spouse or dependant.
- 1.4 The factors provided in this note have been prepared in light of the advice on assumptions in our letter dated 30 October 2018.
- 1.5 This guidance is intended to supersede any factors or advice previously issued, for the purposes of allocation calculations, carried out from 08 April 2019. No advice or factors issued in the past should be used for cases after this date. In particular, this guidance supersedes:
 - "UK Atomic Energy Authority Pension Schemes: Factors for allocation of pension" dated 26 April 2016.
- 1.6 The following cases should be referred to GAD:
 - Where the beneficiary is more than 10 years older than the member.
 - Where the member is below age 55 or over age 65.
 - Where the beneficiary is below age 45.
 - Where a male pensioner allocates in favour of a male dependant or a female pensioner allocates in favour of a female dependant.
 - Where the member has or will have any "non-scheme" or "non-charged" benefits that
 are financed by the employer when they fall due. These members may be optants
 (ie members who have had their pension age reduced to 60) or members with
 Continuing Annual Payments (CAPs) resulting from premature retirement.

Factors for allocation of pension

Implementation and Review

- 1.7 This guidance has been written for pension administrators and assumes some knowledge of general pension terminology, and some familiarity with retirement calculations for the UKAEA Pension Scheme. Any questions concerning the application of the guidance should, in the first instance, be referred to the Authority.
- 1.8 In line with best practice and in order to make sure that factors are being used as intended and the instructions are fit for purpose, we suggest that some example calculations are sent to GAD for review.
- 1.9 The factors contained in this guidance will be subject to review periodically. This will depend on external circumstances, for example whenever there is a change in the SCAPE basis; when changes in the actuarial assumptions adopted for other scheme factors take place; or following each future actuarial valuation where mortality and other relevant experience is reviewed or if other credible and material information comes to light.

Third party reliance

- 1.10 This guidance has been prepared for the use of UKAEA and the scheme administrators for the purposes of demonstrating the application of the factors covered by this guidance only. This guidance may be published on the UKAEA and the scheme administrator's website but must not otherwise be reproduced, distributed or communicated in whole or in part to any other person without GAD's prior written permission.
- 1.11 Other than UKAEA and the scheme administrators, no person or third party is entitled to place any reliance on the contents of this guidance, except to any extent explicitly stated herein. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this guidance, whether or not GAD has agreed to the disclosure of its advice to the third party.



2 Instructions

2.1 For a member wishing to allocate pension to a dependant/spouse under 'Option A' of Rule 4.17 of the Schemes' rules, the amount of annual pension payable to the beneficiary if the beneficiary survives the member should be calculated using the following formula:

$$AlP = P \times F_{yy}$$

where:

AlP = annual pension payable to the beneficiary following the member's

death

P = annual member's pension to be given up at the date of election

 F_{vv} = relevant allocation factor for a member aged 'x' and dependant aged 'y

2.2 It is our understanding that

- Allocated pension receives pension increases under Rule 4.40 before and after coming into payment.
- Where the beneficiary would already (without any allocation being made) be entitled to a pension following the death of the member, that entitlement is unaffected by the decision to allocate pension, i.e. the pension entitlement of the beneficiary as a result of the allocation being made is in addition to any existing entitlement.
- An application to allocate will be of no effect if the member or the beneficiary dies before the day on which the member's pension commences to be payable.

Please let us know if this is not correct, as this guidance will need to be revised.

- 2.3 The relevant allocation factor, F_{xy} , is taken from tables 313 (table 801 in the consolidated factors spreadsheet) or 323 (table 802 in the consolidated factors spreadsheet) and depends on:
 - the member's sex
 - the beneficiary's sex
 - the age (nearest birthday) of the member at the date when the member pension is due to commence or, if the member pension is already in payment, the date that the allocation is made
 - the age (nearest birthday) of the beneficiary at the date when the member pension is due to commence or, if the member pension is already in payment, the date that the allocation is made.

Factors for allocation of pension

- 2.4 The factor to use depends on the member's and beneficiary's age nearest. For example, for a member who will be aged 55 years and 7 months at the date when the allocation is made, the factor for a member aged 56 would be used.
- 2.5 Factors have been produced separately for:
 - a female pensioner allocating in favour of her husband or a male dependant (Table 313)
 - a male pensioner allocating in favour of his wife or a female dependant (Table 323)
- 2.6 The effective date of the calculation is the same as the effective date of the allocation. If the application to allocate pension is made before the member retires then the effective date is the first day from which the pension is payable. If the pension is already in payment then the effective date is the date of the application to allocate. If the application is processed after the effective date then any overpayment of member pension from the effective date onwards will be recovered in full.
- 2.7 Note that an application to allocate may not be made any earlier than the later of:
 - i. 6 months before the date on which the pension commences to be payable; and
 - ii. the date on which the member intends to marry.
- 2.8 Rule 4.28 requires that "It shall be a condition precedent to the allocation of part of a pension under the preceding Rules that the Authority are satisfied that the member is in good health, regard being had to his age, and that the Authority are furnished expeditiously and at the expense of the member with such particulars as they may require of the beneficiary." It is essential that this condition is satisfied. The use of appropriate health checks is particularly important in cases where the option to allocate is made after the pension is in payment.
- 2.9 Where a member takes actuarially reduced early retirement under Rule 5.20 and also allocates pension to a dependant at retirement, the reduction under Rule 5.20 should be calculated first before the allocation, i.e. the pension P in paragraph 2.1 of this guidance is subtracted from the member pension after it has first been reduced under Rule 5.20. Please contact GAD if you have any queries.
- 2.10 The following cases should be referred to GAD:
 - Where the beneficiary is more than 10 years older than the member.
 - Where the member is below age 55 or over age 65.
 - Where the beneficiary is below age 45.
 - Where a male pensioner allocates in favour of a male dependant or a female pensioner allocates in favour of a female dependant.
 - Where the member has or will have any "non-scheme" or "non-charged" benefits that
 are financed by the employer when they fall due. These members may be optants
 (i.e. members who have had their pension age reduced to 60) or members with
 Continuing Annual Payments (CAPs) resulting from premature retirement.



3 Example

Example 1: Male member with female dependant

Allocation Pension factor

•	Date of birth	18/08/1965				
•	Member Sex	Male				
•	Date of birth of dependant	18/07/1970				
•	Dependant Sex	Female				
•	Amount of pension to allocate	£7,500				
•	Allocation date	15/04/2020				
•	Member's age nearest birthday	55				
•	Dependant's age nearest birthday	50				

$$AlP = £7,500 * 5.723 = £42,922.50$$

5.723 (Table 323)

The allocated pension payable to the beneficiary following the member's death is £42,922.50 per annum.



4 Limitations of this guidance

- 4.1 This guidance should not be used for any purpose other than those set out in this guidance.
- 4.2 The factors contained in this guidance are subject to regular review. Scheme managers and administrators need to ensure that they are using the latest factors, as relevant, when processing cases.
- 4.3 Advice provided by GAD must be taken in context and is intended to be considered in its entirety. Individual sections, if considered in isolation, may be misleading, and conclusions reached by a review of some sections on their own may be incorrect. GAD does not accept responsibility for advice that is altered or used selectively. Clarification should be sought if there is any doubt about the intention or scope of advice provided by GAD.
- 4.4 This guidance only covers the actuarial principles around the calculation and application of allocation factors. Any legal advice in this area should be sought from an appropriately qualified person or source.
- 4.5 Scheme managers and administrators should satisfy themselves that allocation calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.
- 4.6 This guidance is based on the Regulations in force at the time of writing. It is possible that future changes to the Regulations might create inconsistencies between this guidance and the Regulations. If users of this guidance believe there to be any such inconsistencies, they should bring this to the attention of UKAEA and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.



Appendix A: Factor tables

List of Tables

- Table 313: Allocation Pension factors for **female** member in favour of her **husband** or other **male dependant**.
- Table 323: Allocation Pension factors for **male** member in favour of his **wife** or other **female dependant**.



Table 313: Allocation Pension factors for female member in favour a male dependant

(Table 801 in consolidated factors spreadsheet)

Age	Age nearest of member pensioner										
nearest of dependant	55	56	57	58	59	60	61	62	63	64	65
45	4.882	4.462	4.082	3.738	3.427	3.143	2.885	2.649	2.433	2.236	2.056
46	5.169	4.715	4.305	3.935	3.600	3.296	3.020	2.767	2.538	2.329	2.138
47	5.487	4.994	4.551	4.152	3.791	3.465	3.168	2.898	2.653	2.430	2.226
48	5.838	5.304	4.824	4.392	4.003	3.650	3.331	3.041	2.779	2.540	2.324
49	6.229	5.648	5.127	4.658	4.237	3.856	3.511	3.199	2.917	2.662	2.431
50	6.662	6.030	5.463	4.954	4.496	4.083	3.711	3.374	3.071	2.796	2.548
51	7.145	6.455	5.836	5.282	4.784	4.336	3.932	3.568	3.240	2.945	2.678
52	7.682	6.928	6.253	5.648	5.105	4.617	4.179	3.783	3.428	3.109	2.822
53	8.281	7.456	6.717	6.056	5.463	4.931	4.453	4.022	3.637	3.291	2.980
54	8.949	8.045	7.236	6.512	5.863	5.281	4.758	4.289	3.870	3.494	3.157
55	9.694	8.703	7.816	7.021	6.310	5.672	5.100	4.587	4.129	3.719	3.353
56	10.526	9.439	8.464	7.592	6.810	6.110	5.483	4.920	4.419	3.971	3.572
57	11.455	10.261	9.190	8.231	7.371	6.601	5.912	5.294	4.744	4.253	3.817
58	12.493	11.181	10.003	8.947	8.001	7.153	6.393	5.713	5.108	4.569	4.091
59	13.652	12.210	10.915	9.752	8.709	7.773	6.935	6.184	5.518	4.925	4.398
60	14.947	13.363	11.937	10.655	9.504	8.471	7.545	6.715	5.979	5.324	4.744
61	16.396	14.655	13.086	11.672	10.401	9.258	8.233	7.315	6.500	5.776	5.135
62	18.017	16.105	14.377	12.817	11.412	10.148	9.012	7.993	7.089	6.287	5.576
63	19.831	17.730	15.827	14.106	12.553	11.152	9.892	8.761	7.757	6.865	6.076
64	21.862	19.554	17.459	15.560	13.842	12.289	10.889	9.632	8.514	7.521	6.644
65	24.138	21.604	19.296	17.200	15.299	13.576	12.021	10.620	9.375	8.267	7.289
66		23.910	21.369	19.055	16.950	15.038	13.307	11.746	10.355	9.119	8.025
67			23.707	21.152	18.821	16.698	14.771	13.028	11.474	10.090	8.865
68				23.526	20.945	18.586	16.439	14.492	12.752	11.201	9.827
69					23.360	20.738	18.344	16.166	14.216	12.475	10.931
70						23.197	20.524	18.086	15.898	13.939	12.201
71							23.028	20.294	17.835	15.629	13.668
72								22.839	20.071	17.582	15.365
73									22.659	19.844	17.334
74										22.472	19.622
75											22.287



Table 323: Allocation Pension factors for male member in favour a female dependant

(Table 802 in consolidated factors spreadsheet)

Age	Age nearest of member pensioner										
nearest of dependant	55	56	57	58	59	60	61	62	63	64	65
45	4.310	3.936	3.600	3.297	3.023	2.775	2.549	2.343	2.156	1.985	1.829
46	4.539	4.137	3.776	3.451	3.159	2.894	2.655	2.437	2.238	2.058	1.893
47	4.792	4.358	3.970	3.621	3.308	3.026	2.770	2.538	2.328	2.137	1.963
48	5.071	4.603	4.184	3.809	3.472	3.170	2.897	2.650	2.426	2.223	2.039
49	5.380	4.873	4.420	4.016	3.654	3.329	3.036	2.772	2.534	2.318	2.122
50	5.723	5.172	4.682	4.244	3.854	3.504	3.190	2.906	2.652	2.421	2.213
51	6.104	5.505	4.972	4.498	4.075	3.698	3.359	3.055	2.781	2.535	2.313
52	6.527	5.874	5.294	4.778	4.320	3.912	3.546	3.218	2.924	2.660	2.422
53	6.998	6.284	5.652	5.090	4.592	4.149	3.753	3.399	3.082	2.798	2.543
54	7.523	6.742	6.050	5.438	4.895	4.413	3.983	3.599	3.257	2.951	2.676
55	8.108	7.251	6.494	5.824	5.232	4.706	4.238	3.822	3.451	3.119	2.823
56	8.761	7.821	6.990	6.256	5.607	5.033	4.523	4.069	3.666	3.307	2.986
57	9.490	8.456	7.544	6.738	6.027	5.398	4.840	4.345	3.906	3.515	3.168
58	10.306	9.167	8.163	7.277	6.496	5.806	5.195	4.653	4.174	3.748	3.369
59	11.218	9.963	8.857	7.881	7.022	6.264	5.592	4.998	4.473	4.007	3.594
60	12.240	10.856	9.635	8.559	7.612	6.777	6.038	5.384	4.808	4.298	3.846
61	13.386	11.857	10.508	9.320	8.275	7.353	6.538	5.818	5.184	4.624	4.128
62	14.673	12.982	11.490	10.177	9.021	8.002	7.103	6.308	5.608	4.991	4.446
63	16.116	14.245	12.594	11.140	9.861	8.733	7.738	6.859	6.086	5.404	4.803
64	17.740	15.667	13.838	12.226	10.808	9.558	8.455	7.481	6.625	5.870	5.206
65	19.567	17.268	15.239	13.451	11.877	10.490	9.265	8.184	7.235	6.398	5.662
66		19.078	16.824	14.838	13.089	11.547	10.185	8.983	7.927	6.997	6.180
67			18.617	16.407	14.461	12.745	11.228	9.889	8.713	7.677	6.767
68				18.187	16.019	14.106	12.414	10.920	9.608	8.452	7.437
69					17.791	15.656	13.766	12.096	10.629	9.336	8.201
70						17.425	15.311	13.440	11.797	10.348	9.076
71							17.079	14.980	13.136	11.509	10.080
72								16.750	14.675	12.844	11.235
73									16.451	14.385	12.569
74										16.165	14.111
75											15.897



Appendix B: Assumptions underlying factors

Financial assumptions

Nominal discount rate 4.448% pa
CPI 2.00% pa
Real discount rate (in excess of CPI) 2.40% pa

Mortality assumptions

Base mortality tables and adjustments: 95% of S2NMA * (males) and 99% of

S2FMA (females)

Dependants 100% S2NMA (males) and 110% S2DFA

(females)

Future mortality improvement

Based on ONS principal UK population

projections 2016

Year of Use 2020

Other assumptions

Proportion of male members for unisex factors 80%

Proportion married 75% (Male) and 70% (Female) assumed married at retirement.

For pensioners over 60: broadly in line with ONS estimates of marital status (as at mid-2008) rounded to the

nearest 5%

Age difference between member and partner Male members 3 years older than

spouse and females members 3 years

younger than their spouse

Allowance for short-term spouse's pensions

(where relevant)

Nil

^{*} This is based on 35% BNFL male mortality (101% S2NMA) and 65% non-BNFL male mortality (92% S2NMA).