The Standard Assessment Procedure (SAP):

Summary of consultation responses and technical changes

23rd October 2013

Introduction

As the Standard Assessment Procedure (SAP) is used to underpin the delivery of a number of key climate change initiatives it is necessary to periodically review the methodology to ensure it continues to meet the needs of both existing and new users. Another objective of the review is to improve the accuracy and reliability of energy performance assessments.

A consultation that sought views on potential changes to the SAP methodology was published on 4th January 2012. The Department was most grateful to those who responded to the consultation. This document has been produced to make available the results of that consultation.

The agreed changes, along with those required for Building Regulations compliance assessment purposes, have been incorporated in a revised SAP document, SAP 2012 version 9.92.

Looking forward, policy administrators will determine the date from which SAP 2012 will come into force for their own purposes. For example, it is understood that for Part L Building Regulation compliance purposes in England SAP 2012 is expected to come into force on 6th April 2014.

It is the intention to implement the agreed changes in Reduced Data SAP (RDSAP), which is used to assess the performance of existing dwellings, at the earliest opportunity.

Content

This document contains a summary of responses to the public consultation on proposed changes to the Standard Assessment Procedure (SAP) methodology. The changes agreed, by DECC Ministers, have been implemented in the SAP 2012 paper, revision 9.92, and this document can be downloaded from www.bre.co.uk/sap2012. The document also contains a link to a table of unattributed consultation responses. A summary of the decisions taken have also been included for information.

Document Name	Content and purpose
Table 1	Summary of consultation responses, by respondent association.
Table 2 – Link	Unattributed consultation responses
Table 3	Summary of change decisions

Table 1 – Summary of consultation responses, by respondent association

	All who responded	Builders / Developers	SAP assessors	Designers/ Engineers/ Surveyors	Manufacturer /Supply Chain	Property management	Specific Interest / trade association	Energy Sector	Other/unknown
Q1: Do you agree that the carbon dioxide emission factors should include energy related CH4 and N2O emissions, quantified as CO2 equivalent?									
Total	**88**	17	6	10	18	5	23	4	5
Yes	**92%**	88%	83%	90%	94%	100%	96%	75%	100%
No	**8%**	12%	17%	10%	6%	0%	4%	25%	0%
Q2: Do you agree that the carbon dioxide emission factors should include transport related emissions?									
Total	**85**	15	5	11	20	6	20	3	5
Yes	**93%**	87%	100%	100%	100%	67%	95%	67%	100%
No	**7%**	13%	0%	0%	0%	33%	5%	33%	0%
Q3: Do you agree that the carbon dioxide emission factors should include energy supply chain emissions in instances when they occur outside of the UK?									
Total	**83**	15	5	11	20	6	18	3	5
Yes	**88%**	73%	100%	91%	95%	67%	94%	67%	100%
No	**12%**	27%	0%	9%	5%	33%	6%	33%	0%
Q4: Do you think the emission factor for both consumption and export of grid supply fuels should be calculated on a system average or a marginal basis? Please indicate either (a) the system average value for both consumption and exports to the grid, (b) the marginal value for both consumption and exports to the grid, or (c) retaining the SAP 2009 methodology (system average value for consumption and marginal value for exports to the grid).									
Total	**84**	16	5	10	18	6	20	4	5
A	**60%**	81%	40%	80%	61%	33%	55%	50%	20%
B	**13%**	6%	20%	0%	6%	33%	20%	25%	20%
C	**25%**	13%	40%	20%	22%	33%	25%	25%	60%
A or C	**2%**	0%	0%	0%	11%	0%	0%	0%	0%
Q5: Do you agree with the recommendation that the principal time period over which emission factors should be projected for use in SAP should be 3 years, but that a 15 year option should also be provided for consideration of longer term impacts?									
Total	**96**	16	6	13	22	6	24	3	6
Yes	**66%**	44%	50%	92%	59%	100%	71%	33%	67%
No	**34%**	56%	50%	8%	41%	0%	29%	67%	33%
Q6: Do you agree that the emission factors should continue to exclude direct CO2 emissions from biogenic (renewable) sources?									
Total	**78**	16	6	11	16	6	15	3	5
Yes	**59%**	38%	50%	64%	63%	83%	67%	100%	40%
No	**41%**	63%	50%	36%	38%	17%	33%	0%	60%

Table 1 – Continued

	All who responded	Builders / Developers	SAP assessors	Designers/ Engineers/ Surveyors	Manufacturer /Supply Chain	Property management	Specific Interest / trade association	Energy Sector	Other/unknown
Q9: Do you agree that wind speed should be taken into account on the basis of dwelling location?									
Total	**92**	17	6	13	21	7	18	3	7
Yes	**78%**	41%	67%	92%	100%	86%	78%	100%	71%
No	**22%**	59%	33%	8%	0%	14%	22%	0%	29%
Q10: Do you agree with the proposals for calculating solar radiation based on orientation and pitch?									
Total	**92**	17	6	14	21	6	18	3	7
Yes	**100%**	100%	100%	100%	100%	100%	100%	100%	100%
No	**0%**	0%	0%	0%	0%	0%	0%	0%	0%
Q11: Do you agree that SAP should anticipate the changes in test conditions likely to be introduced under the European eco-design regulations?									
Total	**76**	16	6	12	13	4	17	3	5
Yes	**62%**	31%	50%	92%	54%	100%	76%	67%	40%
No	**38%**	69%	50%	8%	46%	0%	24%	33%	60%
Q12: Do you agree that the default values for heat losses from storage combi boilers should be amended in the light of the results from recent test programmes?									
Total	**75**	17	6	13	15	4	12	2	6
Yes	**99%**	100%	100%	100%	100%	100%	100%	100%	83%
No	**1%**	0%	0%	0%	0%	0%	0%	0%	17%
Q13: Do you agree that sections D3 and D6 (in respect of declaring SEDBUK and seasonal efficiency values for boilers) of SAP Appendix D should be deleted?									
Total	**67**	16	5	11	14	4	11	1	5
Yes	**75%**	50%	100%	82%	86%	50%	91%	100%	60%
No	**25%**	50%	0%	18%	14%	50%	9%	0%	40%
Q15: Do you agree that the PCDB should be used to hold details of advanced heating controls recognised by SAP?									
Total	**81**	17	6	12	22	4	12	2	6
Yes	**81%**	59%	100%	92%	95%	100%	58%	100%	83%
No	**19%**	41%	0%	8%	5%	0%	42%	0%	17%

Table 1 – Continued

	All who responded	Builders / Developers	SAP assessors	Designers/ Engineers/ Surveyors	Manufacturer /Supply Chain	Property management	Specific Interest / trade association	Energy Sector	Other/unknown
Q16: Do you agree with the proposed treatment of primary pipe work losses? If not, what alternative approaches could be used?									
Total	**78**	17	6	10	17	5	16	2	5
Yes	**73%**	29%	83%	90%	100%	80%	94%	50%	20%
No	**27%**	71%	17%	10%	0%	20%	6%	50%	80%
Q17: In future, should the actual length of pipe work be used in the calculation of primary and secondary losses?									
Total	**78**	16	6	11	17	5	15	2	6
Yes	**46%**	13%	33%	82%	59%	60%	53%	0%	33%
No	**54%**	88%	67%	18%	41%	40%	47%	100%	67%
Q18: Does the approach taken in document STP11/HP01 for determining the default values seem appropriate and reasonable?									
Total	**82**	16	5	11	19	5	18	3	5
Yes	**74%**	88%	100%	91%	47%	80%	67%	67%	100%
No	**26%**	13%	0%	9%	53%	20%	33%	33%	0%
Q19: If so is it reasonable to discount the lower values as being unrepresentative?									
Total	**77**	16	5	10	19	5	16	1	5
Yes	**73%**	25%	100%	80%	84%	80%	88%	100%	80%
No	**27%**	75%	0%	20%	16%	20%	13%	0%	20%

Note: questions 7, 8, 14, 20 and 21 broadly invited respondent's to provide additional information

Table 2 – Unattributed consultation responses are available at:
https://www.gov.uk/government/consultations/proposed-changes-to-energy-assessments-of-dwellings

Table 3 - Summary of Change Decisions

Q1: Do you agree that the carbon dioxide emission factors should include energy related CH_4 and N_2O emissions, quantified as CO_2 equivalent?

Decision: emissions to be included as CO_2 equivalents.

Q2: Do you agree that the carbon dioxide emission factors should include transport related emissions?

Decision: related transport emission to be included.

Q3: Do you agree that the carbon dioxide emission factors should include energy supply chain emissions in instances when they occur outside of the UK?

Decision: emissions to be included no matter where they occur.

Q4: Do you think the emission factor for both consumption and export of grid supply fuels should be calculated on a system average or a marginal basis? Please indicate either (a) the system average value for both consumption and exports to the grid, (b) the marginal value for both consumption and exports to the grid, or (c) retaining the SAP 2009 methodology (system average value for consumption and marginal value for exports to the grid).

Decision: implement option a), system average for both imports and exports.

Q5: Do you agree with the recommendation that the principal time period over which emission factors should be projected for use in SAP should be 3 years, but that a 15 year option should also be provided for consideration of longer term impacts?

Decision: emission factors to be based on 3 year forward look projections.

Q6: Do you agree that the emission factors should continue to exclude direct CO_2 emissions from biogenic (renewable) sources?

Decision: exclusion to continue.

Q9: Do you agree that wind speed should be taken into account on the basis of dwelling location?

Decision: wind speed data to be an influencing factor.

Q10: Do you agree with the proposals for calculating solar radiation based on orientation and pitch?

Decision: calculation to be based on orientation and pitch.

Q11: Do you agree that SAP should anticipate the changes in test conditions likely to be introduced under the European eco-design regulations?

Decision: wait until the Regulations have been published. (Some respondents supported this proposal but there were concerns that making changes before publication could lead to further, additional, amendments.)

Q12: Do you agree that the default values for heat losses from storage combination boilers should be amended in the light of the results from recent test programmes?

Decision: default values to be amended.

Q13: Do you agree that sections D3 and D6 (in respect of declaring SEDBUK and seasonal efficiency values for boilers) of SAP Appendix D should be deleted?

Decision: Sections to be removed.

Q14: The benefit of dual zone time and temperature control diminishes as floor area reduces. At what floor area do you think the current benefit should start to be reduced, and at what floor area should it become zero?

Decision: no change - no consensus on alternative start point or floor area.

Q15: Do you agree that the PCDB should be used to hold details of advanced heating controls recognised by SAP?

Decision: include controls in PCDB.

Q16: Do you agree with the proposed treatment of primary pipe work losses? If not, what alternative approaches could be used?

Decision: implement proposal.

Q17: In future, should the actual length of pipe work be used in the calculation of primary and secondary losses?

Decision: no change to current arrangement. (Some respondents supported this proposal but there was a concern about the practical aspects of determining pipe length, particularly in existing dwelling assessments.)

Q18: Does the approach taken in document STP11/HP01 for determining the default values seem appropriate and reasonable?

Decision: amend default values for untested heat pumps but retain existing defaults for those heat pumps installed under MCS.

Q19: If so is it reasonable to discount the lower values as being unrepresentative?

Decision: discount lower values.