

## BUILDING REGULATIONS ADVISORY COMMITTEE (BRAC)

MINUTES OF THE SECOND MAIN MEETING IN 2009 HELD ON FRIDAY 5 JUNE, 10AM,  
AT COMMUNITIES AND LOCAL GOVERNMENT (CLG), ROOMS G/L&M, ELAND HOUSE,  
BRESSENDEN PLACE, LONDON SW1E 5DU

**PRESENT**

10 A list of those present is at **Annex A**.

**ITEM 1: INTRODUCTION AND WELCOME**

1.1 Members, officials and observers were welcomed to the meeting, particularly an observer from DFP-NI, Phillip Irwin, who was attending his first BRAC meeting.

**ITEM 2: APOLOGIES FOR ABSENCE**

20 2.1 Apologies were received from a member – Ziba Adrangi and from the WAG observer - Francois Samuel.

**ITEM 3: MINUTES OF THE FIRST MAIN MEETING IN 2009 HELD ON THURSDAY 26  
FEBRUARY AND MATTERS ARISING [BRAC (09)M1]**

3.1 The minutes of the last main Committee meeting were agreed. There were the following matters arising:

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- *Item 3.2, first bullet* – the Parts A&C BRAC Working Party paper P9 on flooding had been circulated to all members for information with the papers for today's meeting.
  - *Item 4.3(i), second and third bullets* - the draft risk assessment method guidance for building control was on today's agenda for discussion; BRAC would be consulted on the mapping project as soon as the first process map had been prepared. [Action: CLG]
  - *Item 5.2* – a final list of projects for Sustainable Buildings Division's (SBD) research and development programme had been agreed later than originally anticipated – this would be circulated to BRAC following Ministerial approval. [Action: CLG]

40 **ITEM 4: NOTE OF THE MEETING WITH THE MINISTER ON 5 MAY AND MATTERS ARISING [BRAC(09)N1]**

4.1 The note of BRAC's recent meeting with the Minister, Iain Wright, was agreed. The meeting had been arranged to discuss the role of building regulations, and means of improving the skills and prosperity in the construction industry, in the current economic climate.

50 4.2 The BRAC Deputy Chair updated the Committee and CLG on the deliberations of the follow-up Think Tank meeting held on 4 June. Four clear challenges had been identified which were recorded in paragraph 6.3 of BRAC(09)N1, although these were not exclusive. A discussion paper had also been prepared for the Think Tank meeting.

4.3 It was felt the Minister desired some 'quick wins' but there was a need for short to medium term suggestions and medium to longer term. Some of the points raised at the Think Tank meeting included:

- Improvements in training and education – there should be more on the job training in design and construction.
- There should be a registered builders' scheme as there was currently some poor practice. The benefits of this would be improved reputation for builders and would lead to improved standards and compliance. It should be a criminal offence for builders not to be registered and there should be robust enforcement.
- 10 • More research and direction for the industry was considered necessary from the Government. Climate change was a key driver but an ageing population could drive technology in another direction.
- The greening programme theme – better use of public funding was needed for larger scale demonstrated projects for testing and approving.
- There should be a one-off payment for water meter installation across the country – this would provide greater focus on water use; market changes should be consumer driven wherever possible, not regulation-led. Manufacturers benefited by adapting to and supplying a more aware market.
- 20 • More joined-up thinking was needed on energy efficiency policy, locally and nationally - who was best placed to manage this? National targets could help. How could it be ensured that buildings in use were used efficiently in future and what were the levers to make this happen, e.g. Display Energy Certificates (DECs) linked to enforcement? Some parts of the Building Regulations had such levers.
- Existing buildings – a suggestion was made that smart meters should be installed in every property to measure energy consumption and improve efficiency - there was a precedent for this in Northern Ireland. The Northern Ireland observers were asked to ascertain details and to report back at the next BRAC meeting. *[Action DFP-NI]*
- 30 • The role of regulations in driving up standards was recognised. But a balance was needed to ensure that minimum standards did not discourage the top end of industry.

4.4 The Deputy Chair agreed to prepare a draft BRAC paper and circulate it to members for comments as soon as possible for the purposes of recording BRAC's formal response to the Minister. This would be discussed with CLG officials before it was finalised. It was suggested that 'next steps' could be discussed at the BRAC Awayday. *[Action: BRAC Deputy Chair]*

**ITEM 5: DRAFT RISK ASSESSMENT METHOD FOR BUILDING CONTROL** *[Presentation]*

5.1 A representative from the consultants employed by CLG gave a presentation to BRAC on the interim findings and draft methods relating to their work on developing a risk assessment method for building control inspections (copies of the slides were made available; a note on the rationale for the draft assessment options had been circulated to members earlier).

5.2 BRAC noted developments to date and members raised the following comments in discussion with the consultant:

- There was concern that the project seemed to underplay the need for compliance with Part L (Conservation of fuel and power) and Part B (Fire safety). Inspections must occur at commencement and at completion of work to fulfil Part L and Part B

requirements. It was felt that there should be a move away from a structural emphasis which was inherent in the current statutory notification stages. The consultant advised that the list of stages, which was based on the construction process, would include an additional list of specific items to be inspected to give a further steer of what the inspector would look at in each stage, which included references to Part L and Part B. The present checklist was drawn from local authority examples but there were omissions and this needed to be reviewed.

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- The intention to consult with homeowners on the proposed new approach was welcomed but it was questioned what home owners would be asked. The consultant advised that a selection of homeowners who were currently undergoing notifiable building work would be consulted to ascertain whether they understood the proposed approach. Some builders may also be consulted. A leaflet would be prepared to better explain the system and the proposed changes, which would be made available in advance of interviews.

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- It was considered that the guidance and approach was practical and workable, as long as it was clear to the builder that notification was still required at certain stages. Sight should not be lost of the importance of giving advice to builders on site, to develop their skills and to avoid problems later. Although not within scope of the project, the consultant agreed that it would be important to articulate the role of the building control inspector and what people's expectations should be. Many inspectors believed that their role was to support and avoid problems, but other sectors were moving away from an advisory role.

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- It was noted that private sector approved inspectors had already adopted a risk assessment approach, which was subject to a contractual arrangement between the parties. Their experience had shown that there was a need to communicate to builders on what needed to be inspected. The frequency of inspections was more important for large commercial projects, where building control support was particularly needed. Enforcement was also important.

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- It was suggested that the proposals should look wider than domestic buildings, e.g. smaller commercial buildings; the competence of designers should also be considered, not only builders. Builders should not be categorised as good or bad but as to whether they were competent relative to the project in question. The consultant believed that ranking builders or establishing the risk of a builder would be a difficult issue to tackle, particularly if this was linked to charging. Builder risk could vary depending on the project, which subcontractors were employed, and could change during the course of a project. It was questioned whether builders should be required to register with a recognised scheme.

**ITEM 6: REVIEW OF PART A (STRUCTURE) AND PART C (SITE PREPARATION AND RESISTANCE TO CONTAMINANTS AND MOISTURE) [BRAC(09)P16]**

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6.1 The BRAC Working Party (WP) Chair and CLG introduced paper P16 which updated BRAC on progress on the reviews of Parts A and C and sought final comments on the proposals and the draft Approved Documents (ADs) prior to seeking Ministerial approval to proceed to public consultation. Thanks were expressed to the WP members for their work. BRAC also thanked and wished Richard Shipman well (the lead CLG policy official for Parts A and C) as he would soon be retiring.

6.2 The key drivers for change were set out in paragraph 7 and Annex A of paper P16. It was difficult to quantify the climate change impacts on buildings, so cautionary notes would

be included. CLG drew attention to the confusion in the guidance on the means to resist disproportionate collapse and that it was proposed to revert back to the original 2004 version.

6.3 BRAC noted progress on the reviews but members raised concerns about the implications for Part C of the consultation being carried out by the Health Protection Agency on Radon. The causes and proposed protective measures to address Radon were discussed and the costs involved. The work being undertaken by the UK Climate Impacts Programme (UKCIP) could also have an affect on the Parts A and C reviews, particularly relating to windloading, rainfall, temperatures and flooding. CLG would give further consideration to these issues.

## ITEM 7: REVIEW OF PART J (COMBUSTION APPLIANCES AND FUEL STORAGE SYSTEMS) [BRAC(09)P17]

7.1 The BRAC WP Chair and CLG introduced paper P17 which updated BRAC on progress on the review of Part J and sought final comments on the proposals prior to seeking Ministerial agreement to proceed to public consultation. Thanks were expressed to the WP members for their work. The key issues for consultation were set out in paragraph 6 and Annex 1 to paper P17.

7.2 BRAC noted progress on the review and members raised the following comments in discussion with CLG:

- Scope – in response to a question on whether AD J would cover guidance on larger commercial systems or remain focused on guidance for domestic systems, CLG explained that there was no intention to widen the scope of the guidance; it was felt that commercial installations would be dealt with by engineers using British/European Standards.
- Carbon monoxide detectors – it was noted that the cost benefit analysis showed that only a targeted provision directed towards solid fuel appliances was cost effective and it was suggested that this should be made clear in the consultation document. CLG confirmed that this would be set out in the Impact Assessment.
- Plumbing from condensing boilers – it was noted that there were a lot of complaints about condensing boilers from customers because of the cloud or mist next to the flue outlet, particularly from neighbours affected. This was outside the health and safety scope of Part J but a note warning of potential problems would be included in guidance. Members asked if more detailed advice could be given and it was suggested that this could be done by a reference to section 6 of the *Guide to the Condensing Boiler Installation Assessment Procedure* (the Purple Guide).
- Nuisance/pollution – Members asked about measures to reduce other nuisance/pollution issues from combustion appliances. This was already covered by Clean Air Act provisions but it was considered that it would be useful if AD J explained how these provisions would impact on the selection of suitable appliances.
- Oil Tanks – AD J contained a risk based approach regarding bunding for oil tanks. Industry's view was the risk based approach may not be working. Some members felt that the environmental damage from oil spills was extensive and clean up costs could be very high. There were also other causes for oil spills such as overfilling that may not be addressed by bunding. Theft and vandalism were also issues. CLG was working with the Environment Agency on figures about this and may consult on a proposal for all oil tanks to be bunded. [Action: CLG to forward information relating to the oil tanks impact assessment to BRAC.]

- Concealed flues – it was proposed to include guidance on access to concealed flues in AD J. This guidance had previously been available in a CORGI technical bulletin but it was felt that including the guidance in AD J would be more effective. Some members supported this as architects and builders would be more likely to see the guidance in AD J than a specialist bulletin.

7.3 CLG would email the draft AD J and Impact Assessment to BRAC shortly for urgent comments. *[Secretary's note: these documents were emailed to BRAC on 15 June 2009.]*

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**ITEM 8: PART M (ACCESS TO AND USE OF BUILDINGS) – ACCESSIBLE HOUSING AND LIFETIME HOMES [BRAC(09)18]**

8.1 The BRAC Working Group (WG) Chair and CLG introduced paper P18, which provided a report on the work which had been carried out by the Part M WG. BRAC's views were sought on the recommended way forward in paper P18. Thanks were expressed to the WG members for their work.

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8.2 The detailed findings of the WG had been pre-empted by a discussion on the need of Industry for consistency of application of accessible housing standards at a national level rather than varying in order to be able to deliver efficiencies. BRAC welcomed the need for clarity of national standards. Social inclusion and social justice were also important areas to consider. The WG was therefore formed to reinforce and update the existing evidence base on accessibility to housing. The group's detailed comments on the Draft for Development DD266 would be forwarded to BSI.

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8.3 There was group consensus on the need to review how people used hoists. Home warranty providers would need to keep an eye on issues of waterproofing and accessible thresholds and how this related to issues of climate change and issues of air tightness. CLG had completed some of its research relating to Lifetime Homes Standards, including data extracted from the survey on accessibility and adaptability of the English Housing Stock and further research on reduced health costs/accidents deliverable through application of the standards. A review of policy relating to Lifetime Home Standards would take place in early 2010. The next update on Part M was provisionally due to take place in 2013.

8.4 BRAC acknowledged the valuable work of the WG and members raised the following comments in discussion with CLG.

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- There was some concern about voluntary codes, such as the Draft for Development DD266, which did not have to go through the rigour required for building regulations. They tended to be prescriptive and were automatically adopted by planners. BSI would be issuing a number of publications which could have an adverse effect on ADs. It was suggested that this was a strategic issue and should be explored at the BRAC Awayday. *[Action BRAC]*

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- Reference was made to the Ethics of Engineering Group which had looked at the development of autonomous vehicles and devices, some of which were aimed at helping the elderly and other vulnerable people – i.e. devices that came on automatically such as lights and alarms. CLG explained that assisted living technologies were being considered by other departmental colleagues. There were complex issues associated with these technologies, including sensitivity that people had about technology running people's lives and compatibility with other behavioural issues. The WG looked at spatial requirements rather than technologies which were expensive and currently identified as addressing specific markets rather than general needs housing.

- Early further clarification on the status of Lifetime Homes was requested, which could assist the Code for Sustainable Homes.
- In response to a question about timing and the proposed update of Part M in 2013, CLG explained that this was a very large subject requiring considerable work and consultation, as Part M involved complex issues. Time was needed to get the required robust results. A working/steering group would be set up, which would look at the Draft for Development issues amongst others.

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8.5 BRAC endorsed the four recommendations and the next steps for the work stated on page 6 of P18.

## **ITEM 9: REVIEW OF THE CODE FOR SUSTAINABLE HOMES**

**[Oral report - replaced cancelled paper BRAC(09)P19]**

9.1 CLG updated BRAC on the forthcoming consultations on the proposed changes to the Code for Sustainable Homes (the Code) in 2010 and sought comments.

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9.2 The rate of certified Code homes was now increasing month on month - at the end of April 2009 there were 122 homes certified at post construction stage; this was a jump from the total of 65 in the previous month. The statistics needed to be looked at in the context that the Code had only been operational for two years, which was roughly the time it took to plan, design and build any home.

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9.3 The Code consultation would continue the theme of evolution not revolution, the standard must keep the same currency, i.e. a Code Level 3 house in 2008 would be comparable with a 2010 Code Level 3 house. CLG had now been in the review process for around a year and the basis for change, i.e. the changes to Part L and the Zero Carbon definition remained the same.

9.4 Initially CLG had been aiming for policy consultation with/shortly after Part L and a detailed technical consultation in the autumn. The rationale for this was to get early indications of outline policy for 2010 - once the Part L and Zero Carbon consultations had been responded to it would enable a more detailed technical consultation. However, due to changing timescales with the Part L and Zero Carbon consultations and the Code impact assessment, CLG was, in light of discussions with both the Technical Guide Advisory Group and Policy Group considering combining the two consultations into one.

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9.5 BRAC was supportive of a single consultation. In response to a question about accessibility, CLG confirmed that it was considering harmonising the different areas within the Code potentially into one access section. Members also suggested that other areas of the Code should be reconsidered to remove unnecessary duplication and make it more meaningful to deliver its aims.

## **ITEM 10: ZERO CARBON – NEW NON DOMESTIC BUILDINGS**

**[Presentation]**

10.1 CLG gave a presentation on the Government ambition that every new non-domestic building be Zero Carbon from 2019 (copies of the slides were made available).

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10.2 It was explained that the Zero Carbon focus was on a build standard rather than enforcing actual in use emissions. The definition did not include embodied energy, but involved determining minimum standards of energy efficiency and carbon compliance (including on and near site renewables), with the remainder of emissions to achieve the Zero Carbon standard gained through offsite 'allowable solutions'. There were a number of

challenges including the diversity of types and uses of non-domestic buildings and access to accurate energy use data. Multiple market failures included a split incentive, where costs were borne by developers and builders whilst energy savings were enjoyed by occupants.

10.3 The definition of Zero Carbon included regulated energy (heating, lighting, cooling, hot water) but how far should the standard account for estimated future consumption of unregulated energy (from appliances and processes inside the building), which can vary widely between different types of building and even between different uses of a building? A current priority was to establish an evidence base which reflected the diversity of the non-domestic stock whilst not making the modelling too complex to inform options appraisal.

10.4 The following comments were raised on the consultation issues in discussion between BRAC and CLG:

- A policy statement on the Zero Carbon definition consultation would be published, along with a summary of responses, in the summer.
- With regard to input from engineers in the development of the evidence base, it was noted that Faber Maunsell (now AECOM) and Davis Langdon were involved, alongside Europe Economics, in the consortium working with CLG, and were leading on detailed modelling of 'notional' buildings and technology options.
- Some members questioned whether Energy Performance Certificates (EPCs) and DECs could be incorporated into the Zero Carbon definition by measuring energy consumption of buildings. Work on energy use of existing non-domestic buildings was considered important and related to the work on a new build standard; CLG advised that other departmental colleagues were developing options although this work was at an early stage.
- Members suggested that as today was new build and tomorrow was existing stock – the two policy streams should not be developed separately but the building should be looked at in a holistic way through its life. Expert groups should focus on building types for each sector and bring in all policy groups to try and ensure there was a continuum so that policies did not conflict with each other but worked together. It was also suggested that different building types would have differing challenges so should have different carbon targets and different trajectories to get there. CLG responded that the evidence base was helping to provide a better understanding of the diversity of the non-domestic stock.
- Another suggestion was that embodied energy should also be included in the Zero Carbon definition, otherwise the full life cycle challenge of new buildings would not be addressed. CLG responded that EU standards were being discussed relating to energy embodied in construction products and that a more detailed BRAC discussion might be useful once the EU work was developed further. Currently the Zero Carbon definition did not include embodied carbon, although once build standards tightened and in use emissions fell further, this would clearly become a more important issue in the future and consideration was needed on the most appropriate policy instrument.

**ITEM 11: SUSTAINABLE BUILDINGS – WORK PROGRAMME: ITEMS FOR NEXT BRAC MEETING AND BRAC AWAYDAY [BRAC(09)P20]**

11.1 CLG presented BRAC with SBD's draft work programme plan, as outlined in the annex to paper P20 and flagged up possible items for discussion at the October BRAC

meeting as indicated in the covering paper. SBD's objectives for 09/10 were also circulated at the meeting for BRAC's information.

11.2 BRAC welcomed notification of the divisional work programme plan and raised a few comments. The UK Climate Projections would be presented by Defra/UKCIP at the next BRAC meeting for discussion, although members suggested that an earlier meeting might be held for this purpose. The relevant webpage for the climate projections was: [ukcp09.defra.gov.uk](http://ukcp09.defra.gov.uk) *[Secretary's note: BRAC members were subsequently invited to the official launch of the UK Climate Projections on 18 June and to the construction sector launch on 14 July 2009.]*

11.3 It was noted that the BRAC Awayday 2009 would take place on 5/6 November as usual in Cambridge, but members suggested the Building Research Establishment (BRE) as a possible alternative venue for the 2010 Awayday. The BRAC Deputy Chair agreed to give consideration to the theme and items for discussion at the 2009 Awayday. *[Action: BRAC Deputy Chair]*

**ITEM 12: UPDATES FROM NORTHERN IRELAND, SCOTLAND AND WALES ADMINISTRATIONS [BRAC(09)21]**

12.1 Observers from the Northern Ireland and Scotland administrations commented on developments in their respective countries, as detailed in paper P21, and added further comments on work carried out on Radon.

12.2 In Northern Ireland the Radon affected areas wanted an extension of protective measures and vice versa in those areas that were not affected. Some areas were basalt so there would be no case to justify the expenditure to put in protective measures. Reasonable provision was required. Members noted that post construction testing for Radon was an issue, as there was a need to vacate the building. Radon could come from the ground or building materials and could be a complex issue.

**ITEM 13: ANY OTHER BUSINESS**

13.1 The following other business was raised by BRAC members and CLG officials.

- CLG drew attention to the proposed changes to the classification of BRAC documents and the emailing of these documents referred to on pages 4/5 of information paper P22, as a means of improving security. The latter would be trialled in the first instance.
- CLG also drew attention to information papers P24 and P25, detailing the successes of the BRAC Annual Report 2008 and the new Part G (Sanitation, hot water safety and water efficiency). There would be an announcement in the RBI journal promoting workshops on Part G.
- CLG advised that the consultation on Parts L (Conservation of fuel and power) and F (Ventilation) was imminent. *[Secretary's note: This was published late on 18 June and BRAC was emailed the website link on 19 June 2009.]*
- It was noted that the SAP 2009 consultation was underway and could be found on the BRE website: [www.bre.co.uk/sap2009](http://www.bre.co.uk/sap2009).
- Members requested further information on EPBD-2 and feedback from the HESS consultation, which were referred to on page 3 of paper P22. *[Action: CLG]*

**IN CONFIDENCE/MEMBERS ONLY**

- Members were grateful for the planning portal link provided to the consolidation of the Building Regulations but suggested that the consolidation would be improved if amendments were colour coded. A plea for less use of acronyms in BRAC papers was also made.
- A member indicated that BSI was looking for CLG representation on the CB-Committee. It was also noted that BSI has confirmed that work had commenced on a companion guide to BS8000300. *[Secretary's note: Anthony Burd, CLG has volunteered to attend the CB-Committee.]*

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13.2 BRAC was reminded that the next main Committee meeting would be held on Thursday 8 October 2009. The meeting closed at approximately 3.00pm.

**BRAC Secretariat**  
**Sustainable Buildings Division, CLG**

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PRESENT (for all or part of the meeting)

**BRAC Members**

Michael Finn	Chair
Neil Cooper	Deputy Chair
Tracy Aarons	Member
Keith Bright	"
Peter Caplehorn	"
Alan Crane	"
Nick Cullen	"
Trevor Haynes	"
Adrian Levett	"
David Mitchell	"
Thiru Moolan	"
Andrew Shipley	"
Alastair Soane	"
Lynne Sullivan	"
John Tebbit	"
Peter Warburton	"
Stephen Wielebski	"

**CLG Officials**

Sarah Sturrock	Deputy Director, Sustainable Buildings Division (SBD)
Anthony Burd	Head of Technical Policy, SBD
David Crane	SBD
Richard Harral	"
Paula Higgins	"
Brian Martin	"
Gwyn Roberts	"
Richard Shipman	"
Kevin Flanagan	BRAC Secretary, SBD
Evonne Hopwood	BRAC Secretariat, " "
Robbie Allen	" "

**Observers**

Bill Dodds	Building Standards Division (BSD), Scottish Government (SG)
Phillip Irwin	Department of Finance and Personnel (DFP), Northern Ireland (NI)
Seamus McCrystal	"

**Presenter (Item 5)**

Michael Wright	Greenstreet Berman Limited (Consultants)
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