Alternatives to Travel: A Call for Evidence - Summary of Responses

November 2011

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Executive summary

1. The Department launched the Call for Evidence in April 2011 to find out more about experiences and the impacts of, and future potential for, using alternatives to travel. A total of 65 responses were received from a range of different organisations, covering both large and small companies, the private, public and voluntary sectors and individuals. A number of key messages and points have emerged. These are summarised below.

2. Decisions on use of alternatives to travel – both flexible working arrangements and/or the use of technology - seem to be based on a number of factors:

   - **Business fit** – does a 'different' approach suit the way the business is done. This can be both perceived (i.e. this is the way things have always been done) or actual (for example, the business needs to provide a specific front line service).

   - **Ability to consider and manage change, both of the organisation, led by senior management, and of individuals themselves** – is there a willingness to consider and learn new approaches, a willingness to invest both in new technology and new approaches, management support and trust, a willingness to reduce reliance on 'visibility' in the office, comfort with new technology, and appropriate individual approaches to work.

   - **Technical issues** – availability of suitable technology, broadband coverage, and remote access to information to counter isolation.

   - **Practical issues** – cost of change and ability to invest, suitability of the business set up to utilise alternative approaches, suitability of 'alternative' work locations.

3. With the exception of some of the larger companies, **the public sector is on the whole better at providing flexible working policies**. However this does not necessarily mean that they are at the forefront of introducing alternative approaches nor that they are immune from the barriers which limit take-up. **The private sector (led, unsurprisingly, by the ICT and communications sectors) seems to be better at making the necessary investment in technology and adaptation to embed change.**

4.   **The most successful implementation or use of alternatives to travel are when they are embedded as part of an overall package or approach designed for a particular purpose.** It may be done, for example, as part of an overall transport policy or travel plan, linked with organisational change (such as streamlining estates or part of a location change), to help reduce costs or to improve services.

5.   **The impacts from using alternatives to travel were generally felt by respondents to be positive.** The positive impacts referred to included staff benefits (better work/life balance, good for retention, easing personal travel costs, reduced absenteeism etc.); reduction in business travel, building and time costs; improved productivity (less down-time, happier staff, employees continuing to work from home where before they would have been off sick); improved communication both within organisations (using the different technology to communicate between locations) and externally (staggered hours providing longer periods of cover); and improved resilience during periods of snow or other disruptions.

6.   However, **the limitations of different approaches were also noted**. Not all posts or roles are suitable for certain approaches, and respondents felt that any future legislation should enable employer flexibility to manage approaches to suit their business. There was also recognition that systems need to be in place to manage a different way of working, for example to tackle possible isolation or to ensure the infrastructure is up to scratch.

7.   **The use of technology as an alternative to travel is most successful when regarded as the 'usual' or 'normal' way of doing business.** The take-up and use of teleconferencing is more widespread amongst respondents than videoconferencing (VC). VC is still regarded by many as the expensive option. The response on web-conferencing was more mixed. Whilst in some cases it is seen as a natural extension of existing computer-enabled communication (and which may therefore see it leapfrog VC in terms of take-up), others regard it as a 'new' area of communication and have yet to make the necessary investment.

8.   **There is no 'one-size-fits-all' approach.**

9.   **Respondents to the Call for Evidence suggested that the main role for Government in encouraging uptake of alternatives to travel is to provide guidance, advice and information – and to lead by example.** There was also strong support for improving broadband access, for considering changes to the tax system (to remove barriers and to provide incentives to encourage investment in travel substitution technologies) and for integrating alternatives to travel within other policy areas (such as rail fares and infrastructure planning).

1. Introduction

Background

1.2   The Local Transport White Paper *Creating Growth, Cutting Carbon* was launched in January 2011 and set out the Government's vision for a local sustainable transport system that supports the economy and reduces carbon emissions.

1.3   Getting the economy back on track means making sure people can get to work, to the shops or to their local amenities. And tackling climate change means encouraging smarter ways of getting around.

1.4   We want to encourage people to make journeys by sustainable, low-carbon, modes of transport. But we also want to encourage the use of alternatives to travel.

1.5   For the first time, we have ensured that alternatives to travel – in other words not travelling - is an element within the Ministerial portfolio. Of course promoting alternatives to travel does not mean we are seeking to stop people travelling, we are simply encouraging individuals and businesses to use alternatives where they feel these would be appropriate.

1.6   Many businesses and organisations are already successfully using various alternatives to travel, ranging from teleconferencing, videoconferencing and web-conferencing, to working flexible hours, and working remotely – either from home or from a remote hub.

1.7   At the beginning of April, the Department issued a Call for Evidence on alternatives to travel. Through this Call for Evidence, we sought contributions from a wide range of businesses, sectors, organisations and individuals, to find out more about their experiences and the impacts of, and the future potential for, using alternatives to travel.

1.8   This document summarises the responses we received to the Call for Evidence. This will inform the development of a longer term strategy on alternatives to travel. And this in turn will ensure that alongside improved local sustainable travel choices, alternatives to travel can play a key role in creating economic growth and cutting carbon.

Summary of respondents

1.9   A total of 65 responses were received, either through completion of the Word template or through the online consultation tool. In addition, a further 22 pieces of evidence were submitted in the form of research projects, briefing documents or case studies. Annex A gives a list of those who responded, or were involved with focus groups to launch the Call for Evidence in April 2011.

1.10   Of the 65 responses received, 10 were from individuals while the remainder were on behalf of organisations. The table below summarises the characteristics of respondents, comparing the formal status of the organisation / establishment with the approximate number of staff in the organisation.

Table 1.1						
	Number of staff in the organisation					
Formal status of the organisation	< 10	10-49	50-249	250+	Individual / not stated	**Total**
Company limited by guarantee	1		1			**2**
Central / local government				23	1	**24**
Other non-trading public corporation					1	**1**
Partnership (inc. limited liability partnership) / self-proprietorship	1			2		**3**
Private limited company	5	1	1	5	1	**13**
Public limited company				1		**1**
Public service agency				2	1	**3**
Quasi Autonomous National Government Organisation				1		**1**
Trust / charity	2	2		2		**6**
Individual / not stated	1			1	9	**11**

Total	10	3	2	37	13	65

1.11 49 respondents identified the sector in which their organisation operated. This information is shown in the following table.

Table 1.2	
Sector in which organisation operates	**Number of organisations**
Education	2
Energy supply	1
Information and communication	5
Manufacturing	1
Other	15
Other service activity	1
Professional, scientific and technical activities	7
Public administration and defence	13
Transportation and storage	4

1.12 Most of the organisations that responded described the location of their organisation and their access to the transport network. Many organisations were based in city or town centres, and therefore had good transport links. The majority of organisations had more than one site, with the main one based in a major city or town, and other satellite offices based where service need or customer demand was highest. Central and local Government by their nature tended to be fixed to specific locations such as the county town, or central London. Many also had additional offices to ensure all members of the public could access council services, or to provide their core functions, such as immigration controls at ports.

1.13 Most organisations stated that they had good links to the transport network - either road or rail, with a number also identifying links to cycle networks. Some organisations also highlighted the links they have across the world through electronic communications, while others were based at home therefore not requiring access to transport links on a regular basis.

1.14 The reasons given for choosing the organisation's location varied. Public sector organisations tended to be bound to a particular location, such as the county town or central London. Other organisations said that the

location had been chosen to provide good access to transport links, to be convenient for staff and visitors, or for historic reasons.

2. Summary of responses

Home working and remote working

Q1a and b: Which measures have been implemented in your organisation to support (a) homeworking and (b) remote working?

2.1   There were 59 distinct responses given to question 1a. Many respondents combined questions 1a and 1b (home and remote working) and gave one overall response, possibly because their organisation did not distinguish its approach by location of work.

2.2   In the 59 responses, the following measures to facilitate or promote home working were mentioned:

- Specific home / remote / flexible working policies (23 responses)
- Provision of IT or telephony equipment and/or systems (40 responses)
- Utilities allowances or coverage of costs (6 responses)
- Provision of office equipment such as desks and chairs and compliance with health and safety regulations (6 responses)
- It is the default position (5 responses; all from companies with less than 10 employees)
- Workspace reduction or hot desking (8 responses)

2.3   In many cases, the answers above also applied to remote working. 50 respondents provided some additional information under question 1b. Of these, the majority (36 responses) also referenced IT or telephony equipment or services that enabled them to work remotely or on the move, rather than just at home. A number of responses (13) also mentioned the ability to work at a number of their organisation's sites, either due to an integrated network that allowed them to log on at any PC, or through the availability of 'touchdown' areas where desks were set aside for those that were based elsewhere.

2.4   One respondent stated that it was not possible to work remotely or from home as he was an ambulance clinician. Others stated that home or remote working – or at least the provision of equipment to facilitate this –

was generally the preserve of the senior management. And a small number of respondents stated that their organisation did not have remote and/or homeworking policies.

Reasons for encouraging home or remote working

2.5   A range of reasons were given for encouraging home or remote working, including:

- Better work/life balance for employees (7 respondents)

- Making the organisation a more attractive employer (5 respondents)

- Offers better customer service with longer opening hours and more face-to-face contact with clients/communities (2 respondents)

- Making better use of office space resulting in cost savings (3 respondents)

- Some jobs do not require daily, in-person contact with colleagues (3 respondents)

- Increased productivity / efficiency / effectiveness (8 respondents)

- Beneficial for those with disabilities or caring responsibilities (3 respondents)

- Business resilience, for example during severe weather (2 respondents)

- Reducing travel (5 respondents)

Differences by size and type of respondent

2.6   Responses were analysed by size and type of respondent (Local Government / Central Government / Wider public sector / Individual / Trust or Charity / Private company with less than 10 employees / Private company with 10-250 employees / Private company 250+ employees).

2.7   Large companies (250+ employees) were most likely to say that IT or telephony equipment was provided to support homeworking, with all of those responding stating that this was available, compared to less than half of respondents from small companies (less than 10 employees).

2.8   No companies with less than 250 employees, or individuals, mentioned the existence of homeworking policies, and only a third of the largest companies responding indicated that policies were in place. In contrast, a much greater proportion of Central Government and Trust / Charity respondents stated that such policies existed.

2.9 Companies with less than 10 employees were the only respondents to mention that homeworking was the default position, with over two-thirds operating in this way. Few other measures were identified by these companies, although nearly half also said that IT and telephony equipment was provided.

2.10 Hot desking or workspace reduction was mentioned most frequently by medium sized companies (10-250 employees) and Local Government respondents, whereas this was not mentioned at all as a measure to support homeworking by small companies, the wider public sector or Trust / Charity respondents.

Differences by respondent sector

2.11 Half of respondents in the ICT sector stated that there were procedures in place to cover costs incurred through homeworking – a much higher proportion than in any other sector. The only other sectors to report this measure were the public sector and those respondents included in the 'other' sector category.

2.12 All individuals and all respondents from the ICT sector stated that IT or telephony equipment were provided to support homeworking, compared to less than half of respondents from the professional, scientific and technical activities sector.

2.13 Over half of respondents from the public sector, and half of respondents from the transportation and storage sector indicated that policies were in place to support homeworking. In comparison, no respondents from the professional, scientific and technical activities sector, or individuals, mentioned policies.

2.14 Half of respondents from the transportation and storage sector said that equipment (such as desks or chairs) was provided to support homeworking, a much higher proportion than for other sectors.

2.15 When looking specifically at questions on remote working, the vast majority of references to hot desking or flexible workspaces as a measure to support uptake were made by those working in the public sector.

Q2a: What have been the barriers to implementing homeworking?

2.16 There were 48 distinct responses given to question 2a. Many respondents combined questions 2a and 2b (barriers to home and remote working) and gave one overall response.

2.17   In the 48 responses, the following barriers to home working were mentioned:

- Management expectations or attitudes, or the difficulties in effectively managing someone remotely (11 responses)

- Lack of visibility or the need to be present (not necessarily relating to managers' attitudes) (7 responses)

- The cost of providing all the equipment needed to remote work effectively (11 responses)

- Some roles can only be done in the office or in person (15 responses)

- The amount of equipment needed to work remotely and to meet health and safety obligations (5 responses)

- The impact on team work, or the need to meet colleagues to collaborate (12 responses)

- Problems relating to broadband coverage or speed (3 responses)

- Requirements to access paper files (5 responses)

2.18   There were also several other barriers which were raised by only one or two respondents, such as:

- Concerns about the possible impact on careers

- Lack of a clear and publicised policy on homeworking

- The fact that homeworking does not suit all staff

- Feelings of alienation from the wider team / department

- Insufficient space in homeworkers' homes

- Home situations, such as the presence of children

- Limitations on the number of remote workers that can connect to the system at one time

- The recording of work hours through a swipe card system, with no alternative available for homeworkers

- Concerns about health and safety issues

- Concerns about grievances over inequitable treatment if some staff are allowed to work at home and others are not

- Difficulties in protecting data and networks

- Challenges in sharing work across teams in busy periods

- HMRC requirements on the use of mobile phones and home internet

Differences by size and type of respondent

2.19   Responses were then analysed by size and type of respondent. Respondents from Trusts / Charities were most likely to identify management attitudes or expectations as a barrier to homeworking (half stated this as a barrier, compared to less than a quarter of Local Government respondents and none from the wider public sector).

2.20   Visibility or the need to be seen to be present in the office was identified as a barrier by nearly four in 10 individual respondents, a higher proportion of respondents than any of the organisation categories.

2.21   Cost was identified as a barrier to homeworking by some respondents in most categories – other than the private sector, where no respondents highlighted this, regardless of company size.

2.22   The need to be in the office for operational reasons or service delivery was cited as a barrier most frequently by those in the public sector – two-thirds of respondents from the wider public sector, and nearly as many from central Government, compared to as little as 13% of individual respondents.

2.23   All respondents from the wider public sector identified the impact on team working to be a barrier to homeworking. This was a much higher proportion than for any other category of respondent.

Differences by respondent sector

2.24   Managerial attitudes and expectations were most commonly identified as a barrier by those in the professional, scientific and technical activities sector and those categorised as 'other'. In comparison this was not seen as a barrier by any of the ICT sector respondents.

2.25   All respondents from the transportation and storage sector cited operational or service delivery needs as a barrier to homeworking. This was also a common barrier for respondents from the ICT and public sector, but less so for individuals or those from the professional, scientific and technical activities sector.

2.26   The impact on team work was a barrier for half of respondents from the 'other' sector category, but was not believed to be a barrier for any respondents from the ICT sector.

Q2a: What have been the barriers to implementing remote working?

2.27   36 responses identified some barriers to remote working. These were similar to the barriers to homeworking identified above, specifically:

- IT issues or broadband coverage (11 responses)

- Costs (11 responses)

- Managers' attitudes (9 responses)

- Jobs need to be done in the office / in person (7 responses)

- Availability of remote working accommodation or touchdown areas (3 responses)

- Communication issues (4 responses)

2.28   However, six respondents stated that there were no barriers to remote working.

2.29   Of the small number of respondents that stated that they had overcome the barriers, this was done through good communication, the development of suitable equipment for specific roles, the provision of support, guidance and training (for staff and managers), re-fitting offices to provide touchdown areas or hotdesks, getting HR on board to demonstrate the impact on productivity and morale, or making use of low-end technology such as Skype or teleconferencing instead of high-end products.

Differences by size and type of respondent

2.30   Responses were then analysed by size and type of respondent (Local Government / Central Government / Wider public sector / Individual / Trust or Charity / Private company with less than 10 employees / Private company with 10-250 employees / Private company 250+ employees).

2.31   Cost was not stated as a barrier by any private sector respondent, although was identified by those in most other categories. Conversely, the public sector was more likely than the private sector to say that some jobs had to be done in person rather than remotely, perhaps reflecting the nature of the roles (eg firefighters, prison staff or frontline council staff).

2.32   Local Government respondents were the only ones to mention barriers relating to the availability of touchdown or hotdesking areas.

Differences by respondent sector

2.33   There was little relationship between sector and type of barrier identified, other than the public / private sector differences highlighted above.

Flexible working

Q3a: Which measures have been implemented in your organisation to support flexible working?

2.34 There were 54 distinct responses provided to this question. These responses identified the following measures as having been implemented to support flexible working:

- Flexible working policies (26 responses)

- Ability to work flexi-time (34 responses)

- Ability to adopt other flexible working styles, such as part time or compressed hours (18 responses)

- Home or remote working policies (12 responses)

- Flexibility over location / flexible touchdown areas (7 responses)

- Extension of the Right to Request Flexible Working to all employees (6 responses)

2.35 In addition to the above measures, a small number of responses also mentioned that training, guidance and IT was available to support flexible working.

2.36 A number of reasons were stated for why flexible working was encouraged or supported. These included:

- Reducing environmental impact

- Reducing travel

- More efficient use of resources

- Better work / life balance for employees

- Improve equality of access to career development opportunities

- Broader spread of service availability

- Assists in reducing congestion / peak spreading

- Organisation is focused on goals / outputs not time spent at desk

- To attract and retain the best staff

Differences by size and type of respondent

2.37 Responses were analysed by size and type of respondent. Both local and central Government and the wider public sector were more likely to have flexible working policies in place than the private sector – the majority of respondents from each public sector category stated that they had such policies, compared to only 17% of respondents from large companies (over 250 employees).

2.38 Companies with less than 250 employees were less likely to offer flexi-time than other types of respondent – only 20% of respondents from small companies (less than 10 employees) said that flexi-time was in place compared to the majority of other respondents, and up to 83% of trust / charity sector respondents.

2.39 Other forms of flexible working, such as part-time or compressed hours, were also mentioned more frequently by public sector respondents – ranging from three-quarters of respondents from the wider public sector, to none of the individuals or companies with 10-250 employees.

2.40 There was a less obvious spread in the proportion of respondents in different categories that mentioned home or remote working or flexible locations, but this may be because some respondents covered these issues in previous questions.

2.41 Extending the Right to Request Flexible Working to all employees was mentioned more frequently by respondents from medium sized companies than other categories of respondents.

Differences by respondent sector

2.42 As highlighted above, public sector respondents were much more likely to state that they had flexible working policies in place than respondents from other sectors.

2.43 All individuals and all respondents from the transportation and storage sector said that they had flexi-time in place (although there were only a small number of respondents from the latter category in particular). In comparison, only a quarter of respondents from the ICT sector said that they operated flexi-time.

2.44 Public sector respondents were also more likely than those from other sectors to say that they had implemented other flexible working practices such as part-time or compressed hours. No respondents from the ICT or transportation and storage sectors, nor any individuals, said that these practices were in place.

2.45 As stated above, there was little difference in response rates between categories when considering those that mentioned home or remote working, or flexible locations.

2.46 Those respondents that said that they had extended the Right to Request Flexible Working to all employees were from the professional, scientific and technical activities, public or 'other' sectors. The other categories of respondents did not mention this as a measure that had been implemented to support flexible working.

Q4a: What have been the barriers to supporting flexible working?

2.47 46 respondents answered this question, with 10 saying that there were no barriers to supporting flexible working. Of those that did identify barriers, the following were mentioned:

- The need to meet operational or business needs, or to be available to meet with clients (25 responses)
- Lack of trust from managers (8 responses)
- Costs (3 responses)
- The impact on team work and communication (7 responses)

2.48 A small number of additional barriers were identified by individual respondents, for example:

- Inability to recruit additional staff
- Detrimental impact on quality and performance
- Insufficient work during the period the employee chooses to work
- Planned structural changes
- Concerns that precedents will be set
- Data security concerns
- Lack of education in the workforce about flexible working rights and benefits
- Core hours (difficulties relating to compressing all meetings into 10am-12pm and 2pm-4pm)
- Complexities of managing compressed hours
- Culture of office-based working

2.49 The respondents that stated that there were no barriers came from a range of sectors and types and size of organisation, as did those that believed that operational / business needs were a barrier to flexible working.

2.50 The three respondents that stated that cost was a barrier were all public sector respondents. However, in general there was very little relationship between the types of barriers identified and the sector or type of organisation represented by the respondent. This was largely because there was one predominantly identified (real or perceived) barrier, and others that were identified by a much smaller minority.

Staggered hours

Q3b: Which measures have been implemented in your organisation to support staff working staggered hours?

2.51　40 respondents provided an answer to this question, although most answers were brief and referred back to previous statements. The majority (nearly three-quarters) of respondents explained that they have a flexible approach, with staff working core hours, or an unrestricted flexi-time. A number of these respondents explained that this made formal staggered hours arrangements unnecessary, as staff were able to work the hours that suited them.

2.52　Seven respondents stated that they had policies in place that supported staggered hours; in many cases this appeared to be part of an overall flexible working policy.

2.53　Five respondents explained that formal staggered hours arrangements can or have been agreed, for example to cover childcare arrangements. But in most cases, working patterns were an informal arrangement agreed with line managers who have responsibility for ensuring that adequate cover is maintained.

Q4b: What have been the barriers to supporting staggered hours?

2.54　Only 24 responses were received to this question, and these tended to be brief. Five respondents stated that there were no barriers to supporting staggered hours.

2.55　Of the remaining respondents, seven said that business or operational needs made staggered hours difficult. A further four mentioned the need to maintain office cover between certain hours, although one respondent acknowledged that this could be achieved by having different staff available at different times. Three respondents also said that a staggered hours system was not required as a flexi-system was already in place.

2.56　Additional barriers identified included:

- Culture of set start and finish times to judge when people are in the office

- The need to ensure adequate fire, health and safety management provision and the maintenance of building support systems

- Some managers do not view flexible working as positively as others

- Synchronising work schedules to prevent delays in project delivery

2.57　The majority of the respondents that stated that operational or service delivery needs were a barrier were from the public sector (either central or local government), as were all the respondents that said the need to

ensure office cover was a barrier. The respondents that said there were no barriers came from a range of sectors and types and sizes of organisation.

Teleconferencing

Q5a: Which measures have been implemented in your organisation to support teleconferencing?

2.58 The technology chosen by respondents, and the perceived barriers that were identified often reflected business needs and ability to invest as well as the sector in which the respondents operated - for example, ICT companies were more likely to have good access to technology. For all sectors, teleconferencing was more widespread than either video or webconferencing.

2.59 Overall, only two respondents reported no use or availability of teleconferencing within their organisation.

2.60 The responses to this question indicated that the use of teleconferencing is more embedded within some organisations than others, with a mix of internal and external systems used. BT MeetMe was the most commonly mentioned external resource, with larger organisations often more likely to use their own systems. Teleconferencing has been used for large scale more formal events as well as for simply including more than two callers within a conversation.

Differences by respondent sector and size

2.61 Responses from medium sized and larger companies (seven from companies of 250+ employees, three from companies with 10-250 employees) all indicated the widespread availability and use of teleconferencing. Comments included:

- "Teleconferencing is used for meetings up to Board & Director level";
- "Extensive use of teleconferencing – employees around world use the technology daily";
- "All employees have access";
- "Tech used for different situations – mix of text, voice, video";
- "All phones enable teleconferencing, everyone can set one up";
- "[We have] access to BT MeetMe accounts",
- "[We] use the system a lot – our own system allows up to 15 people on one call".

2.62 Whilst the seven responses from smaller companies (<10 employees) also indicated fairly widespread availability (with only one negative response), their answers revealed more ad hoc use than in larger organisations. There was also a greater reliance on external providers:

- "[We] use dial-up teleconferencing service, no formal measures, ad-hoc use";

- "All employees aware [of teleconferencing] & encouraged to use, particularly in place of initial business meetings";

- "Subscribe to service which provides [teleconferencing facilities] – use more for clients than internal";

- "Personally prefer Skype, but larger teams benefit from shared screen & teleconference";

- "Regular meetings by audio conference".

2.63 Comments from Local Government organisations indicated varying levels of availability and use of teleconferencing. Some organisations have the technology on individual phones, in others it is limited to meeting rooms. Some have invested in the technology and actively encourage staff to use teleconferencing, others take a more ad hoc approach. Of the 17 Local Authorities that responded, three reported limited or no use, one reported it was available but not promoted, four reported that they were developing or had recently implemented teleconferencing facilities, and nine reported fully implemented and integrated teleconferencing systems. Responses included:

- "All staff required to use as first option for meetings";

- "Previously location and use limited, now rolled out to 95% of organisation";

- "Use for meetings up to 20 people";

- "BT MeetMe used, raised staff awareness, we have saved over £156,000 from face to face meetings";

- "Must be considered, though most meetings are local and face to face";

- "[Teleconferencing is] available in key locations, also trialling BT MeetMe";

- "All phones capable, but no policy on using to limit travel";

- "Available in meeting rooms using BT MeetMe";

- "Facilities available & promoted";

- "All phones capable".

2.64 All seven Central Government responses referred to the use of teleconferencing and covered both formal arrangements (the BT MeetMe approach or use of 'spider phones'), as well as access through regular handsets.

2.65 There were six responses from the trust/charity sector, all of which indicated use of teleconferencing. In several cases this was part of a deliberate attempt to negate the need to travel. A similar approach was seen in the wider public sector (which also had six positive responses).

2.66 There were nine responses to this question from individuals, eight of which reported using teleconferencing in the workplace; however, some saw the technology as more integrated and encouraged than others. One individual respondent said it was not used.

Q6a: What have been the barriers to introducing teleconferencing, or if it has not been introduced what do you consider are the reasons for this?

2.67 The private sector response was largely positive, with many reporting no real barriers to use of teleconferencing – and none which were not surmountable through training and encouragement.

2.68 Other sectors were also generally positive, with the most common barriers noted being those of habit and education – and the suggestions that not all business was suitable to be done via the phone, that there should be a balance between teleconference and face to face meetings.

Differences by respondent sector and size

2.69 The majority of the larger companies responding (10-250+ employees) have found few or no barriers. Those that were mentioned were seen as surmountable; for example, encouraging employees up the learning curve (which is getting easier as product designs improve), slow roll-out, slow take-up, cost, and confidence (again overcome through training).

2.70 Even amongst smaller companies (<10 employees) there were few concerns. Those issues referenced include mobile coverage, lack of need for teleconferencing, a requirement for face to face meetings, confidence in the technology, and training (where using facilitators helps). These concerns were very similar to those raised by trusts and charities and the wider public sector where many felt that there should be a balance between the use of face to face meetings and telecommunications.

2.71 Although 14 of the 17 Local Authority responses indicated availability and use of teleconferencing, this sector referred to a variety of barriers with a general theme of 'reaction to change and new technology'. As

employers, authorities liked the technology as they could see the cost benefits, but many reported difficulties in encouraging employees to maximise its use. Securing the benefits requires people to learn how to use the technology, both in terms of what buttons to press but also adapting their approach to work to communicate effectively on a voice-only basis. Other barriers included: limited need, not popular with users, coping with change – both new technology and approaches, working with outdated technology, lack of education and instruction, cost, habits, lack of promotion and difficulty finding a quiet room in which to participate.

2.72   By comparison, the seven Central Government responses reported very few significant barriers. Those that were mentioned included costs of equipment upgrade, local behaviours and attitudes, inconsistent staff knowledge and lack of a clear user policy. It was noted that, over time, comfort with new technology was gradually becoming less of an issue.

2.73   From a user perspective, the nine individuals responding were generally positive, though there was a view that face to face meetings were often 'better' and concerns were raised regarding the sound quality of teleconferencing as well as a call for better instructions and awareness.

Videoconferencing

Q5b: Which measures have been implemented in your organisation to support videoconferencing?

2.74   The use of videoconferencing (VC) does not appear to be as widespread as teleconferencing. VC is more likely to be used and available in larger organisations. For less formal situations, Skype and webcam are increasingly the alternatives. There were some reports of the under-use of systems, and VC seems to work best when there is a concentrated effort to push its use and a range of technology is provided to suit different circumstances and needs.

Differences by respondent sector and size

2.75   Within the private sector the use or availability of VC is often linked to the size of the company. Six out of seven of the largest companies responding (250+ employees) reported that they had well-equipped VC facilities and several mentioned using different technology for different situations; for example, desk-top webcams, round table and full immersion. The companies currently without VC capability are in the process of upgrading all laptops to have webcams for future use.

2.76 VC is also either currently used or (in the case of one respondent) being developed within medium sized companies (10-250 employees). However, there was a more mixed response from smaller companies (<10 employees) where one reported regular use, three reported limited use either by Skype or by buying in services when needed and three reported no use at all.

2.77 Within the public sector around half (eight) of those Local Authorities responding made use of VC, to varying degrees. In some cases VC is part of an overall approach to transport and travel. Elsewhere authorities have had equipment for seven or eight years, and, though currently underused, they are investing in upgrades to increase its use rather than scrapping the technology. Of those without VC, two are in the process of developing or trialling the technology. Another has set up a system purely for the purpose of communication with the county council. Four Local Authorities recorded no use of VC, or left this answer blank.

2.78 All Central Government respondents indicated that VC was being pushed, both as an alternative to travel (with user information sent out to staff and accompanied by a policy of not travelling unless necessary), but also as way of conducting business.

2.79 Availability within the charitable and wider public sector was more varied, often dependent on size and business needs. For example, one charity reported use of VC to connect offices at opposite ends of the country whilst another is part of an international organisation. There was one report of using Regus Business Centres to access VC technology on an ad hoc basis and one suggestion that VC is being superseded by teleconferencing and web conferencing.

Q6b: What have been the barriers to introducing videoconferencing, or it has not been introduced, what do you consider are the reasons for this?

2.80 Overall, the most significant barriers to the introduction of VC identified were:

- costs (19 responses)
- usability/confidence in using the new technology (17 responses).

Other concerns raised were

- interoperability (8 responses) and the
- general preference for face to face meetings (6 responses).

2.81 Several respondents also suggested that their area of business – or the fact that the majority of their meetings took place within a restricted area – meant that VC was not necessary. Whilst cost was of key concern to

those responding on behalf of organisations, individual respondents concentrated more on the usability of VC and their preference for face to face meetings.

Differences by respondent sector and size

2.82   Two of the seven largest companies responding (250+ employees) - both ICT companies - reported no barriers. Where issues were mentioned, most related to confidence and education in using VC which were generally surmountable with training. The other potential barrier was cost, particularly of the better quality telepresence facilities. The financial aspect was also of concern to medium-sized companies, who also mentioned reliability and interoperability of technology (although these were apparently improving over time).

2.83   For those smaller companies (<10 employees) that used VC or felt that they had a need for VC (four out of seven respondents of this size), bandwidth or unreliable connectivity was the most common issue, with costs and managing the technology (described as time-consuming and technically challenging to set up) being other barriers cited. Responses suggested that for the smaller companies the type of VC technology being considered is much smaller scale than the larger companies.

2.84   For Local Authorities, cost was the most common barrier, although one commented that they needed to be clearer about the benefits of VC start-up costs off setting travel savings. Ability to use the technology or comfort with the VC approach was the next most common concern.

2.85   Within Central Government, where VC use or availability is more embedded, several reported no real barriers, having had VC systems up and running for a number of years. Others mentioned interoperability as a barrier (though one which was being overcome), technical skills (again, a barrier which was decreasing over time) and cost (which prevented wider roll-out).

2.86   For Trusts, Charities and the wider public sector (12 responses), cost was the most common barrier (one reference was made to the "ease and lower costs of audioconferencing and web sharing through Live Meeting"), followed by need ("insufficient critical mass both within our own organisation and with potential third parties") and lack of familiarity with the technology.

2.87   Those individuals responding were more representative of the employee side and indicated concerns about the usability of the technology, the need for VC, and preferences for face to face discussion. Cost was recognised as a barrier by one invididual respondent.

Web-conferencing

Q5c: Which measures have been implemented in your organisation to support web-conferencing?

2.88   The impression given by the large companies responding was that web-conferencing is more accessible and, with laptop webcams, easier to introduce. However comments from some of the smaller companies (who may not be able to afford larger-scale VC equipment) were more mixed. Web-conferencing is not widely used in central or local Government; however five out of six respondents from the wider public sector and similarly the Trust / Charity sector reported regular use of the technology.

Differences by respondent sector and size

2.89   Of the largest companies, six responded positively regarding web-conferencing. Five companies stated that they already provided all staff laptops with webcams, providing training and using 'go to meeting'. One company is developing its technology in this area with all staff laptops to have webcams in future. Views of the technology were positive, suggesting that take-up of this approach is more straightforward than VC with the necessary technology more easily available and user friendly.

2.90   Smaller companies reported less use (only one medium-sized company and one small company reported using web-conferencing), though there were two reports of attending webinars as well as use of filesharing and instant messaging.

2.91   Five out of six respondents from the Trust / Charity sector reported using web-conferencing, with three enabling all their staff access from their desktops. Similarly, within the wider public sector five out of six respondents said that they use web-conferencing technology. Both sectors referred to Microsoft Live meeting and Webex. There were also references to involvement in webinars, the use of e-portals for training and smartboards to share information. One respondent linked teleconferencing with webconferencicng to enable document sharing.

2.92   Only seven out of 17 Local Authorities responding to this question make use of web-conferencing. They mentioned using a variety of approaches including: Genesys meeting centre, desktop equipment, Juniper extranet 'secure meeting', and Cambridgeshire Meeting Exchange. Whilst six authorities said that they made no use of this technology, the remaining four respondents indicated that they were developing the capability with some in the process of contract letting.

2.93 Central Government take up seemed to be slower with only two out of seven respondents from this sector reporting current use. Of the remaining five, three are developing the capability: one is considering joining up to 'civil pages', the civil service online work collaboration facility; one is trialling Microsoft Office and desktop VC facilities, and one is planning an upgrade to enable 150,000 users to share data and 3,000 to access voice and video webconferencing.

2.94 Of the individuals responding only four use web-conferencing or have the technology available. Five either do not have access or do not know if facilities are available.

Q6c: What have been the barriers to introducing web-conferencing, or if it has not been introduced, what do you consider are the reasons for this?

2.95 Across the sectors, IT issues (including complexity, security and broadband reliability) were highlighted as the main barriers, closely followed by staff being comfortable with and skilled in using the technology. Several respondents said there was no business need for WC, with face to face discussion still preferred. Cost was an issue, but less so than for VC.

2.96 Within the private sector, comfort and skills were the most common barriers, with the smaller companies (particularly those with fewer than 10 employees), also referring to need, general 'IT issues' and cost. Three of the largest companies reported no barriers. All three were from either the IT or communications sector.

2.97 Within the public and charitable/trust sector, barriers referenced included staff confidence and skills, general 'IT concerns' and need. There were only a small number of concerns regarding costs.

2.98 For individual respondents, perception of need was the most common barrier (many did not think it was suitable or necessary), with IT issues and comfort with, or skills in, new technology other concerns.

Other alternatives to travel

Q9: Are there any other innovations relating to alternatives to travel that your organisation is using or introducing which you think should be considered as part of this Call for Evidence?

2.99 Aside from the use of webinars and instant messaging (which one respondent described as a great way to substitute for the water cooler casual conversations and especially first thing when starting work), there

were no other new alternatives to travel type measures referred to by respondents. Instead many described different ways of ensuring that their employees made sustainable travel choices (of which alternatives to travel were an important part). Alternatives to travel and its related technology was also described as being part of wider initiatives seeking to improve efficiency in use of buildings, or, in the case of one County Council, part of an overall 'Smart Office' approach which is intended to improve both service output as well as internal working practices. The underlying message was one where alternatives to travel is not the end point or the sole solution, rather it is one aspect or tool amongst others.

2.100 One large company stated that they employed 'Dynamic Messaging' to encourage travellers to take more sustainable travel options or book VC rooms instead of air travel. Another has introduced desk sharing (which involves remote working for some of the time) and is looking at using BlackBerrys to enable desk booking.

2.101 There were several references to operating travel or transport hierarchies which include alternatives to travel. There were also examples of companies running shuttle buses from the local tube station, Local Authority staff being provided with a free public transport travel permits within the area, or access to pool bikes.

2.102 There were several interesting examples of organisations incentivising staff to make more sustainable decisions. One charity operates a 'No Fly Zone' for all staff within the UK and near Europe. They also commented on client companies linking increased use of travel alternatives to charitable giving (e.g. one video conference 'buys' one acre of rainforest) or using the money saved by avoided travel to invest in conferencing technologies. One company offers a free online TelePresence calculator to help businesses calculate the savings they can make from greater use of VC. Another respondent referred to clients who have organised specific social events to reward staff who have saved time and money by not travelling to get their work done. As well as rewarding sustainable choices, such events also tackle some of the potential downsides of remote communication such as isolation through team building and boosting morale.

2.103 There were also suggestions of ways in which issues or concerns regarding alternatives to travel approaches could be overcome and the benefits maximised. Several referred to work hubs, both suitable for small businesses to enable them to balance remote and office working as well as providing access to technology such as VC, as well as larger or governmental organisations making better use of its estate to enable staff to work from the most logical location. Several Local Authorities also mentioned bringing outside partners into authority buildings using space freed up through more efficient or flexible working.

Impacts

Question 7: What have been the impacts of introducing any or all of the following: home working; remote working; flexible working; staggered hours; teleconferencing; video conferencing; web-conferencing?

2.104 Whilst most respondents had made some assessment of the impacts of the above approaches, not all had been able to quantify them – and indeed some of the impacts mentioned would be difficult to measure.

2.105 The positive impacts referred to included staff benefits (better work/life balance, good for retention, easing personal travel costs, reduced absenteeism etc.); reduction in business travel, building and time costs; improved productivity (less down-time, happier staff, reduced absenteeism as employees continue to work from home where before they would have been off sick); improved communication both within organisations (using the different technology to communicate between locations) and externally (staggered hours providing longer periods of cover); and improved resilience during periods of snow or other disruptions.

2.106 The private sector response was overwhelmingly positive. The exceptions were more about noting the limitations of different approaches (not all posts or roles suit certain approaches and any future legislation should enable employer flexibility to manage approaches to suit their business), and the recognition that systems need to be in place to manage a different way of working, for example to tackle possible isolation or to ensure the infrastructure is up to scratch.

2.107 The majority of public sector responses were also positive, although several said there were limitations to what could be achieved and it was clear that alternatives to travel was only part of the story with pressure on parking slots or travel budget cuts being equally if not more persuasive. Only a few reported a negative impact on the workloads and pressure on those remaining in the office.

2.108 Those that have made some attempt to quantify the benefits recorded the following:

- Within the private sector, Telefonica gave various examples of the type of savings which can be achieved through home working. For example, a Slough-based sales manager would make emission savings of 8552kg per annum from home working (as opposed to creation of 39kg per annum from increased home energy use). Travel time avoided was 30 working days per annum. These counter the concern that increased energy use in the home negates any savings secured from less time in the office.

- Microsoft reduced their travel by 27% in the last four years.

- E-work Advantage is a smaller organisation (with less than 10 employees) but has shown with all clients that these approaches can increase staff productivity by up to 20%, as well as reducing staff turnover and absence.

- Within the public sector, the Higher Education Environmental Performance (HEEP) at the University of Bradford has conducted surveys of five universities to assess the benefits of virtual meeting technologies. Their results included reduced stress/time of travelling (70-80% respondents), better control of time (55-75% respondents), and easier communication with colleagues (40-55% respondents).

- The Environment Agency estimates that teleconferencing saves over 3000 business miles each month and around 800 tonnes of CO_2 per month (based on their staff survey). Whilst their business mileage has reduced by 19 million miles (33%) in the last five years, and by 5 million miles (12%) in the last year alone.

- Within the Charitable sector, WWF uses videomiles software to record savings from videoconferencing. This shows that in 2010 297 VC calls were made, saving over 44,000 miles of avoided flying, 13.4 tonnes of carbon, £10,000 and 324 hours of saved travel time. By the end of the first quarter of 2011, the benefits of using VC have exceeded those of the previous year with 126 VC calls, saving 48,000 flight miles, 15 tonnes of carbon, £11,000 and 376 hours of travel time. WWF suggests that the more familiar people become with the technology the more likely they are to use it.

2.109 On the more negative side, respondents referred to increased home energy costs, difficulty in managing morale, the fact that not everyone is suited to home/remote working or has a job which allows this, and the potential to increase pressure on those remaining in the office. Respondents were also clear that alternatives to travel alone is not a solution nor a driver for change. It needs to be included within a package of measures. For example several respondents suggested that reduced travel and subsistence budgets and fewer on-site parking spots were stronger drivers to changed behaviour.

2.110 Of those providing some quantification of the situation, TfL provided information on overall travel demand from their perspective as a strategic transport authority. In terms of travel demand, in London there has been no fundamental shifts in either peak demand (there is evidence of longer peaks but not lower peak demand) or overall demand. London Underground carried a record number of passengers during the 2010/11 financial year, exceeding 1.1 billion for the first time. They expect the number of trips to grow further from 24 million to 27 million per day by 2031.

Role of Government

Question 8: In your opinion, what role or roles, if any, could Government play in encouraging a more widespread uptake of alternatives to travel?

2.111 There were a range of suggestions for what Government could do to encourage a more widespread uptake of alternatives to travel. The most commonly referenced was the **promotion of examples/positive messages** (25 comments). In addition to simply spreading the word this would also include the provision of feasibility studies and monitoring tools. There was one mention of funding; however generally respondents were calling for more information to enable informed choices and to build the case for change.

2.112 There were 20 references to **improved broadband and general internet-related issues,** particularly from those with experience of working in rural areas.

2.113 There were 19 references to **Government leading by example**. This came from both public and private sector respondents and was seen as a powerful if not essential tool in getting the message across.

2.114 15 references were made to the **tax system**, both in terms of sorting out the existing approach which can see investment in alternatives to travel initiatives as 'benefits' with a bureaucratic and financial burden attached, but also suggestions to turn the tax system to promote change – rewarding flexible working or investment in alternatives to travel technology.

2.115 12 references wanted to see alternatives to travel taken into account within **other policy areas**. For example rail fares (where flexible or part-time workers cannot always take advantage of full/standard time savings), or infrastructure planning (suggesting that the Government approach should move away from automatically separating work and home).

2.116 There were five references to '**government incentives**' (a catch-all term including examples such as encouraging companies to report on flexible approaches and investment in home work computers – computers4home).

2.117 There were two suggestions that Government should **provide services** to enable the use of technology by smaller companies or individuals (for example, sponsoring work hubs or increasing technology available in libraries), and two suggestions that there was **no role** for Government, one of which suggested that any investment should go into improving the road network. This illustrates the range of comments received as another

response commented that infrastructure funding should be reduced or limited to push or nudge people towards considering alternatives to travel.

2.118 The suggestions were spread fairly evenly across the different sectors. Although several of the larger companies referred to tax issues they also mentioned broadband improvement and providing positive examples and messages.

2.119 The smaller companies similarly covered all the various suggestions. Amongst these there were only two references to tax and three looking for positive messages and examples. These respondents were more likely to refer to accessing tools and guidance as well as the availability of resources such as work hubs.

2.120 Within the public sector there was support for help or guidance which organisations could use to encourage take-up of alternatives to travel; however, there was also a recognition that they should be leading by example. It should be noted however that not all 'lead by example' suggestions came from within the public sector.

Greenhouse gas emissions targets

Q10: The Government has a legally binding target to reduce greenhouse gas emissions by 80% in 2050 from 1990 levels. In your view, what role could alternatives to travel play in ensuring this budget is met?

2.121 It was widely recognised that transport contributes a significant proportion of emissions to the UK total (though there was variation in the percentages quoted). Most respondents agreed that the broad spectrum of approaches covered by 'alternatives to travel' could have a role in reducing carbon emissions. However a range of views was presented on the extent to which this would be significant. The different opinions were spread across the different sectors and organisation size.

2.122 20 responses suggested that alternatives to travel could and would have an important role to play in keeping to the greenhouse gas emissions budget. This was particularly because of its potential to reduce reliance on, and therefore the emissions from, aviation. However there were several comments that this impact could only be achieved through stronger encouragement and more widespread take-up of alternatives to travel.

2.123 A common conclusion was that alternatives to travel were important but as part of a wider more broad-based approach - for example "reducing

the need to travel and encouraging low carbon options requires a multi-faceted approach". These comments saw alternatives to travel as part of a general sustainable transport policy or hierarchy covering a range of travel options (identified by 11 respondents), while others saw alternatives to travel having an impact alongside a reduction in building costs and emissions either through increased remote working or use of hubs (three respondents). Two respondents thought that the impact of alternatives to travel could only be maximised through decarbonising electricity supplies and monitoring. One respondent commented "the role of alternatives to travel is supportive but dependant on other factors progressing along a similar path".

2.124 11 respondents agreed that alternatives to travel had a role to play in reducing greenhouse gas emissions, but suggested that it would only have a minor impact. Aviation, road freight, infrastructure improvements, energy, procurement, modal shift, alternative fuels, power sources, transport efficiency, low emission vehicles, parking limitations and general transport strategy were all mentioned as being of greater importance.

2.125 Four respondents struck a note of caution by highlighting the potential negative impacts of increased homeworking or reduction in central building space, in particular the efficiency of heat and electricity requirements of home working.

2.126 Various attempts were made to quantify the impacts of different measures:

- One individual respondent calculated that, given their daily round trip of 70 miles, being home-based would save 350 miles per week.

- Merseyside Fire and Rescue Service has calculated that their commuter emissions account for 15-25% of their organisation's direct emissions. Therefore remote or home working is likely to have a significant impact.

- Winchester City Council reported a reduction in the total business mileage claimed by staff and members of 5.5% from 2008/09 levels.

- HEEP (Higher Education Environmental Performance) findings suggest carbon savings of 50-200kg greenhouse gases per virtual meetings (assuming two people avoid travel per meeting).

- Centro has calculated that by encouraging each of their 342 full time members of staff to work at home one day a week they could secure a 20% reduction in CO_2 emissions from travel (assuming each individual remained at home and did not travel elsewhere).

- The TUC quoted research by the Institute of Engineering and WSP Environmental which has shown that carbon emissions could be up to

30% higher per home worker compared to those in offices where energy efficiency gains may be made through economies of scale.

- Microsoft has reduced travel by 27% through the use of technology.

- Research amongst members of the Institute of Travel and Meetings has estimated that new technologies would contribute to a reduction in travel by up to 18%. 58% of their members (buyers of travel within businesses) said that alternative technologies would be the biggest driver of change within their programmes.

- The Workhubs Network pointed out that the biggest savings could be achieved by those who worked solely from home with no office to go to – i.e. homeworkers, 62% of whom are self-employed.

- According to WWF-UK's latest 'Moving On' research, greater use of alternatives has resulted in nearly half of FTSE 500 companies cutting their flights by an average of 20% in the last two years. Alternatives to travel play a major role in enabling this.

- IT company Intellect suggested that travel substitutes could replace up to 50% of business flying (around 15% of all flights) if appropriate solutions were used intelligently, in conjunction with enlightened travel policies.

- Case studies from many Cisco customers show that the promotion of video and web conferencing can reduce the need for business travel by 30%.

Discrimination and equality of opportunity

Q11: Is there any potential for, or evidence that, the use of alternatives to travel measures could discriminate directly or indirectly on, or could affect equality of opportunity of the different equalities groups?

2.127 Some extensive answers were provided in response to this question. These can broadly be categorised as positive or negative impacts on different groups from measures relating to home or remote working, audio or video conferencing, or general flexible working measures. Responses are summarised below according to different types of alternatives to travel measures.

Home or remote working

2.128 Respondents highlighted that home or remote working could have positive impacts for certain groups – for example, pregnant workers who may be more comfortable at home, disabled workers who are more likely to have suitable adjustments and facilities at home, those who would find

travel difficult or expensive, or working parents. Home working was also believed to be a positive measure in terms of facilitating meeting religious requirements – for example, with Jewish workers able to finish earlier on Fridays before Sabbath, enabling Kosher or Halal practices to be followed, or making life easier for workers observing Ramadan.

2.129 However, some areas of potential discrimination were also identified. For example, several respondents identified that home working could increase a sense of isolation while others highlighted that home working is not practical or appropriate for all and so could lead to inequalities in the workplace.

2.130 Although homeworking will reduce travel costs, these costs may be simply transferred to heating or lighting costs, which could be discriminatory against those on lower incomes or with physical impairments who are less able to travel.

2.131 A number of respondents also felt that homeworking could be discriminatory against disabled staff who may require reasonable adjustments to be made to their workplace. These may be less forthcoming at home than in an office, or may be felt by employers to be prohibitively expensive, effectively preventing disabled employees from working at home.

2.132 Several respondents also highlighted that homeworking is often confined to those in senior or management roles, and therefore this is discriminatory against those in more junior roles and against women and black and minority ethnic staff who tend to be over-represented in lower grades.

2.133 Other potential areas for discrimination that were identified in relation to homeworking include the fact that homeworkers may be beyond the reach of regulatory authorities which can lead to abuse of employment rights, that homeworking policies can discriminate against those that do not have access to broadband and/or computers, and that an increase in homeworking could result in career development difficulties for those on low incomes who may not have suitable homeworking environments.

Audio or video conferencing

2.134 A number of respondents felt that audio and video conferencing technologies could provide positive solutions for those with physical impairments who may find to hard to travel. These alternatives to travel measures were also felt to have positive impacts for those who find travel difficult or expensive, for homeworkers who may appreciate the human contact to reduce their sense of isolation, and for working parents.

2.135 Only one negative, and potentially discriminatory, impact of audio and video conferencing was identified, but this was identified by a number of respondents. This related to the ease of use of these technologies for those with visual or hearing impairments, meaning that such individuals could effectively be excluded. However, some respondents highlighted that some videoconferencing technologies can be equipped with sign language facilities.

General flexible working principles

2.136 A significant number of respondents stated that they felt that alternatives to travel and flexible working were beneficial to a number of groups, for example those with mobility impairments, pregnant workers, single parents, or those with childcare or caring responsibilities. Other benefits to flexible working measures were the ability of those with physical impairments to travel outside peak hours, and changes to travel patterns leading to reduced stress and reduced pressures on the transport network.

2.137 The main issue that was identified as an area for potential discrimination with general alternatives to travel measures was against older workers, who a number of respondents felt may less confident or able in the use of newer technologies.

2.138 Respondents also felt that flexible working could potentially be discriminatory as it is not generally available to those not in professional employment, and may be less suitable for younger workers who may be less able to work without supervision or who may be more likely to be in supporting roles.

2.139 Lastly, one respondent pointed out the importance of not assuming that one size fits all – as this in itself can be discriminatory.

Physical or social barriers

Q12. Are there any physical or social barriers to participation / access to alternatives to travel measures?

2.140 A number of barriers were identified by respondents, not all of which are strictly physical or social. Some respondents re-stated barriers set out in response to earlier questions. The main barriers identified were:

- The need for social interaction (6 responses)
- Cultural issues, including the need for face-to-face meetings, and managerial attitudes (12 responses)

- Lack of broadband availability, or internet speeds (6 responses)
- Suitability of home environments (including whether appropriate IT equipment was available and/or specialist requirements met) (9 responses)
- Cost (6 responses)

2.141 Some other barriers listed by smaller numbers of respondents included:

- Staff working for government like to travel by car as they receive a generous amount in mileage claims
- Potential reduction in pool of available staff to recruit from if there is an insistence that some hours are homeworked
- Barriers relating to disability
- Constraints relating to childcare or caring responsibilities
- Familiarity (or lack of it) with the systems used
- Limited public transport availability affecting access to flexible working
- Increased employer obligations from a health and safety perspective
- Impact of the recession, with employees more reluctant to ask to work from home due to high unemployment and job insecurity
- Perception that flexible working impedes career progression
- Expectation of staff to maintain team cover
- Lack of education or training in using technology

Differences by size and type of respondent

2.142 Responses were analysed by size and type of respondent. Respondents that identified the need for social interaction as a barrier were from local or central Government or large companies (more than 250 employees). Cultural issues were more likely to be identified as a barrier by respondents from the wider public sector and small companies (less than 10 employees), whereas these issues were not seen as a barrier by any respondents from medium or large companies, or those from trusts or charities.

2.143 Half of respondents from medium sized companies (10-250 employees) identified IT or broadband issues as a barrier to alternatives to travel, a larger proportion that any other type of respondent. The other half of respondents from medium sized companies identified the suitability of home environments as a barrier. This was also a barrier for two-thirds of respondents from central Government. Cost was not deemed to be a

barrier to respondents in medium or large companies, but was to a proportion of all other respondents.

Differences by respondent sector

2.144 Responses were also analysed by sector. Social issues were most likely to be identified as a barrier by respondents from the public sector, although those categorised as from 'other' sectors also felt that this was an issue. Half of individuals who responded to this question felt that cultural issues were a barrier, in comparison to no respondents from the ICT or transportation and storage sectors.

2.145 IT issues were most likely to be a barrier to respondents from the professional, scientific and technical activities sector, although some respondents from the public and 'other' sectors also identified such barriers. Half of all individual respondents also felt that the home environment was a barrier to alternatives to travel, a greater proportion than any other sector. This was not identified at all as a barrier by respondents from the ICT or transportation and storage sectors.

2.146 There was only one respondent from the ICT sector that completed this question, and they felt that the main barrier was cost. This was also believed to be a barrier by respondents from the public and 'other' sectors, and by individual respondents.

3. Research submitted

3.1 A number of research reports, briefing notes and case studies were also submitted as evidence. To avoid replication of existing work, these have not been summarised in this document, but can be accessed via the links in the table below.

Table 3.1	
Submitted by / Produced by	**Title and reference (if available)**
British Chambers of Commerce & the Chartered Institute of Personnel & Development	Flexible working: Good business. How small firms are doing it www.britishchambers.org.uk/.../cipd_bcc_report.pdf
Chartered Institute of Personnel & Development	Flexible working briefing note http://www.cipd.co.uk/hr-resources/factsheets/flexible-working.aspx
Department of Trade & Industry	The Third Work-Life Balance Employees' Survey: Executive Summary (August 2006) http://www.bis.gov.uk/files/file32116.pdf
Family Friendly Working Hours Taskforce	Flexible Working: working for families, working for business http://www.dwp.gov.uk/docs/family-friendly-task-force-report.pdf
Vodafone	Case study: Mobile employees keep snowbound UK on the move http://www.vodafone.co.uk/consumer/groups/public/documents/webcontent/vftst062027.pdf
Vodafone	Case study: Leading luggage retailer Tripp going places thanks to Vodafone innovation http://www.vodafone.co.uk/consumer/groups/public/documents/webcontent/vftst061593.pdf
Vodafone	Case study: Meeting the One in Five challenge http://assets.wwf.org.uk/downloads/vodafone_challenge_case_study.pdf
Vodafone	Case study: Daily Express sports writer hits home with Vodafone Sure Signal

	http://www.vodafone.co.uk/consumer/groups/public/documents/webcontent/vftst061574.pdf
Department for Transport Social Research & Evaluation Division	Review of Current Evidence on Teleworking
Communications Management Association & the Carbon Trust	Carbon Intent Project – Homeworking and Teleconferencing http://www.thecma.com/content_pdf/press/Carbon_Intent_Guidelines_April_2009.pdf
Network Rail	Letter of response to the Call for Evidence
Ministry of Justice	Briefing on 'Best for flexible working' special award
Ministry of Justice	Briefing on MoJ family friendly policies & practices http://www.workingfamilies.org.uk/articles/pdf/article/14
Microsoft	Summary of projects; business case study http://www.nbtn.org.uk/pool/resources/ms-it-travel-case-study.doc
The Workhubs Network	Time to go Home http://www.timdwelly.com/portfolio/Time%20to%20go%20home.pdf
The Workhubs Network	Workhubs – Smart workspace for the low carbon economy http://www.workhubs.com/sites/default/files/workhubs_report_final.pdf
Tim Dwelly/Andy Lake	Can Homeworking Save the Planet? http://www.flexibility.co.uk/downloads/Canhomeworkingsavetheplanet.pdf
Tim Dwelly	Live/work business briefing www.liveworknet.com
Sally Cairns	Can teleconferencing reduce business travel?
O2	Tomorrow's Workspace www.o2tomorrowsworkspace.com
Independent Transport Commission	Occasional Paper: The Implications of the 24/7 Society for Transport http://www.independenttransportcommission.org.uk/
JISC and SusteIT	Virtually Sustainable - Conferencing and New Ways of Working in Universities and Colleges

| | http://www.goodcampus.org/virtually-sustainable/ |

4. International experience

4.1   Alongside the Call for Evidence, the Department also sought evidence on international experiences of alternatives to travel, to find out more about other countries' policies and experiences in this area and any impacts or barriers that had been observed.

4.2   Information was accessed from a number of British embassies[1] through the Global Science and Innovation Network, jointly funded by the Department of Business, Innovation and Skills (BIS) and the Foreign and Commonwealth Office. Contributors were asked to provide a general overview of the national approach to alternatives to travel and to confirm the existence (or not) of Government policy to promote these approaches. They were also asked to identify the barriers either to the development of policy or to the implementation of alternatives to travel, as well as the associated positive and negative impacts.

4.3   The responses indicated that the level of Government involvement in promoting alternatives to travel varies from country to country. For example, some countries such as Switzerland, Italy and Poland have national Government policies to promote or encourage take-up, whilst others, such as the Czech Republic, Spain or Germany, leave the issue far more for individual companies or regional government to decide. Other countries, such as Sweden and Spain, have a broadband strategy and see ICT as having great potential to contribute to a range of goals, but this is not included in transport policy as a specific alternative to travel. The Dutch Government appears to be one of the leading Governments in terms of developing a specific policy on alternatives to travel, with the Smart Working Smart Travelling platform launched in March 2011. This aims to ensure that 2 million employees are working and travelling in a smarter way in 2015, and the government has provided €10 million funding for 2010-2012. In addition, 50 well-known Dutch companies have formed an Association of Employers that will champion Smart Working Smart Living. In China, the Government aims to tackle congestion and the causes of congestion through better planning and development, reducing the need for people to travel by

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[1] Information was received from Canada, China, the Czech Republic, France, Germany, India, Italy, Malaysia, the Netherlands, Poland, Singapore, Spain, Sweden, Switzerland, Taiwan, Israel and the USA.

locating employment nearer to residential areas, and staggering the opening hours of government organisations and shops.

4.4　The US Federal Government also has a teleworking policy that is set by legislation, including the Telework Enhancement Act 2010. This Act directs agencies to designate a Telework Managing Officer, mandates all federal agencies to draft a teleworking policy and notify employees of that policy, requires that teleworking employees have a written agreement with their manager, directs agencies to incorporate telework into Continuity of Operations Plans, and sets benchmarks for reporting back to the Office of Personnel Management. In May 2011, a federal survey was carried out to gauge telework progress[2]. This showed encouraging results; for example 86% of federal agencies had established a teleworking policy, 84% had established and filled a Telework Managing Officer (TMO) position, and 86% of TMOs reported that telework participation had increased over the past six months. Similarly to Britain, the three main challenges were identified as capturing / managing data to track success, management support, and technology support.

4.5　Some countries stated that they had no alternatives to travel policy, but relevant technologies were frequently used to cut travel time and costs. A small minority of countries, such as Malaysia and Taiwan, said that they had no policies relating to this area and flexible or remote working was not generally available in the workforce although it may be implemented in a small number of individual companies.

4.6　In general, the positive and negative impacts of implementing alternative to travel approaches highlighted in the responses, and the barriers to greater take-up, were very similar to those seen within the UK.

4.7　The positive benefits perceived to have resulted from the promotion or implementation of alternatives to travel included:

- Improved employee productivity (6 references)
- Improved quality of work
- Reduced absenteeism (2 references)
- Improved resilience (in bad weather or other emergencies)
- Potential savings in building costs (4 references)
- Savings in travel costs (3 references)
- Improved employee satisfaction and motivation (3 references)

[2] http://www.teleworkexchange.com/uploads/1000/543-Federal_Telework_Progress_Report_060711_FINAL.pdf

- Improved employee attraction and retention (2 references)

- Improved ability to accommodate employees with disabilities (2 references)

- More flexibility in a global network

- Helps tackle congestion through reducing commuting (2 references)

- Reduces emissions from transport (3 references)

- Reduces road construction and repair costs

- Helps work/life balance, including care of the elderly and children (6 references)

- Reduces crime from homes being occupied

- Improved attractiveness of country's knowledge economy

- Encouraging urban planners to take travel needs into account when planning urban developments

4.8 The negative impacts associated with alternatives to travel, particularly remote or flexible working, included:

- Loss of direct management or 'visibility' of employees (2 references)

- Client perception of employee availability

- Loss of work/home life boundaries

- Potential for reduced productivity through increased distraction

- Isolation and reduced social interaction (4 references)

- Increased home costs (e.g. heating and lighting)

- Investment costs to secure necessary remote/homeworking equipment

- Not all jobs are suitable for teleworking.

- Potential impact on service industries in city centres (for example, restaurants)

4.9 The overall success from the development or implementation of central Government policy has been mixed. In some cases there has been no appetite to push this area, particularly where other political and national concerns take precedence or where it has not been seen as an area for central government involvement. Even where central Government advice on commuting has been made available, targets set for sustainable development, or where proposals are being developed between Government and the trade unions to encourage and enable the take-up of teleworking, significant shifts away from the traditional approach to

work have still been hard to achieve. The barriers to increased implementation or take-up of alternatives to travel referenced included:

- Investment/availability of infrastructure (for example, laptops or internet bandwidth) (7 references)
- Attitudes towards different approaches or the prevailing culture (10 references)
- Difficulties in translating macro-level Government aims into practical action on the ground (3 references)
- Suitability of business (2 references)
- Legal matters or regulations (for example, relating to health and safety) (4 references)
- Stereotypes, from employers and employees (2 references)
- Transport use and infrastructure (for example, high propensity for car use or cheap and efficient public transport) meaning there are fewer obvious drivers for considering alternatives (3 references)
- Requirements for workers to clock in each day
- The difficulty of behaviour change
- Non-functioning online Government services
- Frequent powercuts in some areas
- Unsuitable working environments at home
- Security issues relating to removing information and documents from the office.

A. Respondents

A.1 The following is a list of all those who contributed to the Call for Evidence.

A.2 Responses were received using the template questionnaire from:

- Telefonica O2 UK
- Ipswich Borough Council
- Working Families
- Winchester City Council
- Norfolk County Council
- DHC
- Sabre Holdings and Get There
- Somerset County Council
- JMP Consultants Ltd
- RAC Foundation
- GlaxoSmithKline
- Department for Communities and Local Government
- Merseytravel
- CloudPresence Ltd
- Higher Education Environmental Performance Improvement, University of Bradford
- South Gloucestershire Council
- Centro
- Living Streets
- Environment Agency
- Kent County Council
- Department for Education
- Home Office and Agencies
- British Vehicle Rental and Leasing Association

- Transport for London
- Suffolk County Council
- Trades Union Congress
- Merseyside Fire and Rescue Service
- Cambridgeshire County Council
- Newcastle City Council
- Business in the Community
- Ministry of Justice
- Microsoft Ltd
- Eversheds LLP
- Sussex House and Petsitting
- Essex County Council
- The Institute of Travel and Meetings
- Jacob Bailey
- Zerum
- Cornwall County Council
- Workhubs Network
- Ministry of Defence
- eWork Advantage Ltd
- Department of Energy and Climate Change
- Dorset County Council
- The Telework Association
- Portsmouth City Council
- WWF-UK
- Knowsley Metropolitan Borough Council
- Intellect
- Network Rail
- Norfolk Fire and Rescue Service
- Mott MacDonald Ltd
- St Edmundsbury Borough Council
- Transport Planning Society

- Department for Work and Pensions

- Cisco International Ltd

- Nine individual respondents

A.3   Additional evidence was also provided in the form of research reports, briefing notes and case studies, and these are listed in Section 3.

A.4   Participants at two focus groups held in April 2011 to launch the Call for Evidence included:

- Winchester City Council

- Avon & Wiltshire NHS Trust

- Bristol City Council

- Bradford University

- Environment Agency

- Merseyside Fire and Rescue Service

- Suffolk County Council

- Aviva

- Microsoft Ltd

- BT

- CBI

- Federation of Small Businesses

- Chartered Institute of Personnel Development

- Cisco

- Ceuta Healthcare

- Trades Union Congress

- Price Waterhouse Coopers

- Independent Transport Commission

- WWF-UK

- The Telework Association

- Work Wise UK

- RAC Foundation

- Flexibility

- Knowledge Ability Ltd

- BSkyB
- GlaxoSmithKline
- Business in the Community
- National Business Travel Network