University of Oxford

Business travel toolkit 2012

A practical guide to reducing business travel and costs, brought to you by the University’s Sustainability Team.
1 Introduction

Travel is an integral part of working in academia. This toolkit does not attempt to curb what is considered part of the core business of the University. Instead, it offers advice to staff planning a business trip to help you choose the most appropriate travel mode, whilst also promoting alternative non-travel arrangements for staff wanting to make time and cost savings.

Why do we need a Business Travel Toolkit?

HEFCE has committed to linking capital funding to carbon reduction performance after 2011, and has set targets for the higher education sector to reduce emissions by 34% by 2020 (against 1990 levels), and 80% by 2050 (against 1990 levels).

HEFCE requires the University to have a carbon management plan in place by 2011, to monitor and report emissions from business travel, and staff and student commuting by December 2012 and to set targets by December 2013.

It is estimated that business air travel alone currently accounts for 7% of the University of Oxford’s CO2 emissions.

Sustainable business travel is about encouraging staff to make informed choices about the way they travel and being aware of the consequences of these choices – on their health, their environment and their local community.

The University’s Environmental Sustainability Policy, approved by the University Council in 2008, contains a commitment to reduce carbon dioxide emissions from work-related travel and University-owned vehicles.

This toolkit suggests ways in which staff and students can help the University to meet that commitment.

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1 ‘Carbon reduction target and strategy for higher education in England’ (HEFCE 2010/01)
2 University of Oxford Carbon Management Strategy
2 Non-travel alternatives

Audio and videoconferencing
Rather than flying to a meeting, students and staff should consider arranging an audio or video-conference. Doing so will reduce the department’s environmental impact whilst also offering other advantages including:

- Convenience
- Cost savings for travel, accommodation and staff time
- Ability to link several sites simultaneously
- Access to remotely located experts
- Having a set time for the meeting encourages more control and less time wasted on non-agenda items

If your department does not own audio or video conferencing technologies then please refer to www.admin.ox.ac.uk/media/global/wwwadminoxacuk/localsites/estatesdirectorateglobal/wwwadminoxacuk/localsites/estatesdirectorateglobal/documents/travel/videoconf.pdf (internal only). Table 1.0 lists venues that have rooms and equipment with full IT support that are open to all members of the University. Table 2.0 lists venues that can be booked via the JANET Videoconferencing Service (JVCS) www.ja.net/services/video/jvcs/

Further details on videoconferencing within the University are available at www.oucs.ox.ac.uk/videoconferencing

If you want to speak to a department that is successfully using audio and videoconferencing to save travel costs and staff time please contact edward.wigzell@oued.ox.ac.uk

WebEx and Skype
WebEx is a web conferencing service that gives staff the tools to seamlessly collaborate and share information. With WebEx, staff can share presentations, applications and their entire desktop with colleagues from around the world. Further details are available at www.oucs.ox.ac.uk/webex

Skype (www.skype.net) is a popular VoIP software product that allows users to make free VoIP calls to other Skype users. The University requires that anyone using Skype on the Oxford network should configure the software as specified in the installation and configuration instructions at www.oucs.ox.ac.uk/network/voip/index.xml.ID=skype

OUCS offer a short course every term called ‘Skype: Safe and legal’ (www.oucs.ox.ac.uk/itlp/courses/catalogue) which will teach you how to install and configure Skype securely and legally on the University network.
3 Shifting from air to rail

The choice of travel mode between air and rail is a function of relative cost, including travel time and convenience. Rail travel is commonly considered the more convenient of the two options, for example the lack of a requirement to check baggage, or repeated queuing for check in, security and boarding as well as the typically high on-time reliability as compared to air.

Separately, from a business traveller’s perspective, rail can offer amenities such as:
- mobile phone network availability
- booth tables
- more elaborate power outlets (AC mains outlet vs DC 12 V outlet)
- more elaborate food service
- no low altitude electronics ban
- self service baggage storage area (eliminating checked baggage).

Rail travel is less weather dependent than air travel (severe weather conditions such as heavy snow, heavy fog, and volcanic ash clouds do not usually affect the journeys; whereas flights are generally cancelled or delayed under these conditions). Also rail stations are usually located nearer to urban centres than airports.

Other things being equal (i.e. prices, service quality), staff will choose the mode which minimises travel time. Evidence on point-to-point travel times by aviation and rail suggests that the range beyond which rail cannot compete on travel time is around 500 miles (800 km):
- On journeys of less than 250 miles (400 km) conventional rail will usually be faster than air for point-to-point journeys (e.g. London to Manchester is 184 miles (296 km) by rail, London to Brussels 232 miles (373 km)).
- On journeys below 500 miles (800km) high-speed rail has the potential to enable significant shift from air to rail (e.g. London to Edinburgh 393 miles (632 km) by rail, London to Amsterdam 376 miles (605 km)).
- However, above 500 miles (800 km) the air option is likely to be faster in terms of overall door-to-door journey time and as a result the rail option would need to have other advantages (e.g. significantly lower prices) to be competitive. For example, cities such as Berlin (748 miles (1,204 km) from London by rail), Milan (874 miles (1,406 km)) and Madrid (1,207 miles (1,942 km)) are beyond the 500 miles (800 km) range.

For these reasons it is recommended that business travel between destinations on the UK mainland and for journeys between England and Paris, Brussels or other Eurostar destinations is undertaken by rail rather than air.

Business travellers can compare the CO₂ emissions for different travel modes using the calculator at www.transportdirect.info/Web2/JourneyPlanning/JourneyEmissionsCompare.aspx

3 Meeting the UK aviation target – options for reducing emissions to 2050, Committee on Climate Change, December 2009
4 Case studies

University of Oxford, Economics Department

The Economics department regularly use their videoconferencing facility for meetings with funding/research organisations (e.g. World Bank), addresses to conferences (e.g. Economic Outlook 2010 Conference), DPhil vivas (they obtained special permission to do this) and to conduct job interviews for research officers.

University of the West of England, PhD research candidates

Bristol-based University of the West of England has begun using the JVCS Desktop feature to interview potential PhD research candidates effectively from around the globe without them having to incur the cost or time of leaving home.

“This is good for the university as it broadens our addressable market for new research talent,” said Audio Visual Coordinator, Joe Gillett. “Whereas before we probably would not have attempted such an ambitious truly global approach to recruiting new researchers, JVCS Desktop is allowing candidates in far away places as much as an opportunity for consideration as those closer to home, even without access to full scale VC equipment.”

So far there have been live link ups with candidates in Egypt, Iran, Bangladesh, Malaysia and Germany. Said Gillett, “All our interviewers and candidates were impressed with the straightforward approach to setting up each videoconference interview via JVCS and found the ability to clearly see as well as hear one another of immense value.”

The MAGIC Group, PhD students

The MAGIC group of 19 universities (http://maths.dept.shef.ac.uk/magic/index.php) runs a wide range of postgraduate-level lecture courses in mathematics, using videoconferencing technology.

The project is funded by the Engineering and Physical Science Research Council and uses Access Grid technologies to broadcast maths lectures to postgraduate students based at all of the partner sites.

Students are able to register their attendance, view the lectures and interact with students at other participating sites. An interactive whiteboard is used so that lecturers can annotate as they would in a usual face-to-face lecture, and a presentation is shared to all sites. All participants can communicate with each other and the lecturer either by speaking or by use of the instant messaging tool included in the software.

Professor Jitesh Gajjar, one of the project leaders said, “The project is creating a culture change in the way that we train our PhD students. Before MAGIC only a few of the large institutions had the resources to give postgraduate lecture courses. The smaller institutions with just a handful of research students were not in a position even to contemplate giving such training. Post-MAGIC, PhD students not only in the UK but also worldwide have access to live lectures and online resources in every area of mathematics.”
## 4 Case studies

### SEPnet, PhD students
South East Physics Network (www.sepnet.ac.uk) is a consortium of seven partner universities working together to advance and sustain Physics as a strategically important subject for the UK economy and its science base in the South East Region of England. They offer postgraduate lectures taught across the network by videoconference.

### Cranfield University, Research and industry collaboration
A handful of departments at Cranfield University are using WebEx and have seen major teamwork and productivity benefits, including time, cost and carbon savings. Now the University wants to encourage other departments to adopt WebEx where it can add value to their research and industry collaboration.

One Institute at Cranfield calculated the time, cost and carbon savings from conducting their meetings via WebEx rather than face-to-face in Italy:

<table>
<thead>
<tr>
<th>WebEx</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three WebEx connections for 2hrs @ £0.19 per min per connection</td>
<td>£70</td>
</tr>
<tr>
<td>Two airfares and associated costs for round trip to Bologna 2 x £300</td>
<td>£600</td>
</tr>
<tr>
<td>Total saving:</td>
<td>£530</td>
</tr>
</tbody>
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**Details**
5 Contact details

For information on staff travel and funding:

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For information on overseas travel:
www.admin.ox.ac.uk/uohs/at-work/travel

For information on Skype training:
Skype: Safe and legal
www.oucs.ox.ac.uk/itlp/courses/catalogue