



Corporate Report 2009

ARUP





**Lessons from Aceh**

Key Considerations in Post-Disaster Reconstruction

Jo da Silva

Disasters Emergency Committee  
ARUP

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The image shows the cover of a report titled "Lessons from Aceh: Key Considerations in Post-Disaster Reconstruction" by Jo da Silva. The cover features a photograph of a reconstructed village with wooden houses and a body of water. The report is published by ARUP and the Disasters Emergency Committee. The copyright notice at the bottom reads "© Arup and Disasters Emergency Committee, (DEC) 2010".





# Chairman's foreword

I am delighted to introduce this Corporate Report that covers Arup Group's performance for the 2008-09 fiscal year in the two key areas of finance and sustainability.

Our financial performance continued to be strong, but the worldwide economic recession created difficult trading conditions for us, as for many in our industry. I expect these conditions to continue to be challenging in many of our markets for some time, but the downturn has not affected everywhere equally, and some businesses and locations continue to thrive. Fortunately, Arup is a diverse organisation with a flexible approach to business that remains attractive to many of our clients. Our trust ownership structure helps kindle an independence of spirit that is reflected in our people and our work.

Today, much of our focus is on helping our clients to plan for an unpredictable future and to prepare for a low-carbon economy, devising solutions to these challenges in both the developed and developing world. To coincide with the 15th United Nations Council of Parties (COP15) hosted by Copenhagen in December 2009, Arup joined over 950 companies from around the world in signing the Copenhagen Communiqué, calling for "a global deal on climate change that responds credibly to the scale and urgency of the crises facing the world today".

Our sustainable, integrated development approach addresses the interdependency of land use, energy, waste, water, transport, agriculture, economics and sociology.

It underpins an exclusive strategic partnership to which we committed this year to the C40, a group of the Mayors of the world's largest cities committed to tackling climate change, and the Clinton Climate Initiative. We are providing strategic advice to aid climate change policy development and design.

Arup also became the Lead Partner of Cambridge University's global Sustainable Cities Programme that aims to develop and spread best-practice solutions to the most pressing urban development challenges faced by policy-makers and private sector providers of urban infrastructure, products and services.

And on 26 December 2009, five years after a tsunami struck the coast of Indonesia and Sri Lanka, Arup's report on reconstruction in the Indonesian province of Aceh for the UK's Disasters Emergency Committee (DEC) was published. '*Lessons from Aceh: Key Considerations in Post-Disaster Reconstruction*' (pictured left) emerged from an assurance mission that our seismic and humanitarian specialists carried out on behalf of the DEC towards the end of 2007. It shows how humanitarian and construction professionals can learn from the tsunami experiences and apply best-practice in future post-disaster reconstruction projects.

As we enter 2010, I am confident that Arup will continue to make a real difference for our clients and the communities in which we work. Our focus on creating meaningful, future-proofed solutions will ensure that we are well prepared for the economic recovery to come.

Philip Dille  
Chairman, Arup Group









# Sustainability

At Arup, our progress towards being a truly sustainable firm is a journey of improvement, where each step along the way informs the next. With each step comes greater clarity and insight, such that our exploration of sustainability now touches everything that we do, including the way we approach sustainability on behalf of our clients.

This holistic view has required more organisation, more teamwork, more commitment, but the outcomes are much more meaningful as a result, with new concepts, experience and intellectual growth. This journey of self-discovery has created new knowledge, skills, focus and direction.

Our approach to integrate sustainability across the breadth of our business model resulted in the publication of our first firm-wide Sustainability Policy in 2007. The policy provided a shared language with which to talk about sustainability across the firm and a framework within which we can fulfil the aspirations of our staff and live up to our core values.

September 2009 marked two years since its launch. In the spirit of continuous improvement, we have now published an updated Sustainability Policy (2009), to ensure that it remains relevant and that it continues to evolve with the firm.

One major change is the integration of our Environmental Policy into the new Sustainability Policy 2009. In bringing the two together, we ensured the combined policy covered our objectives for both the environment and for wider sustainability issues.

The Sustainability Policy 2009 does not and cannot represent the final word about sustainability at Arup. We know we have a lot more work to do; more that we need to be accountable for. We are constantly working to develop new and meaningful goals that will help move us forward on our sustainability journey.

Over the past two years, Arup has been working with the Clinton Hunter Development Initiative and the John McAslan Foundation to design a **new prototype for rural schools in Malawi**. The building design has recently attracted considerable media attention, and also won a 2009 Cityscape Award for Architecture in Emerging Markets, in the category of 'Built Community Buildings'. Schools in Malawi are delivered within restrictive budgets and are often hot, dark, and far from the standard we believe to be adequate. The team set out to design a building to address these fundamental issues, within the reality of the onerous budget constraints. The work provides an insight into the challenges of meeting the needs of the world's poor within sustainable development, not simply designing within limits.

# Sustainability

Importantly, the new Sustainability Policy satisfies the requirements of ISO 14001 and its mandatory commitments, while remaining true to the intent of the original Sustainability Policy. We remain committed to the view that implementation will help us to develop a sustainable business that is environmentally and socially responsible, while ensuring that we continue to be aligned with core Arup values. The changes to the policy are highlighted in green on the page to the right.

Our Sustainability Policy will continue to shape the direction of the firm. We hope it will help in the development of existing markets for Arup and open up new opportunities, help us deliver better solutions for our clients, offer our people new and exciting ways to work, demonstrate to all stakeholders that we 'practice what we preach', and create a lasting and positive legacy for future generations.

As we continue our exploration, we also continue to measure our progress across four core areas – our business, our people, our facilities and our external relationships. The following pages report our performance against a selection of global key performance indicators for the last financial year, 1 April 2008 to 31 March 2009. They also highlight a range of sustainability achievements and initiatives across the firm for calendar year 2009, and look ahead to the future.



# Sustainability Policy Statement

## Mission

To shape a better world

## Objectives

The firm will implement practices that promote economic security, social betterment and environmental stewardship and will strive for continuous improvement of performance in these areas.

To deliver this, the firm aims to:

- set a sustainability strategy for the firm;
- be a leader in sustainable development in areas relevant to its business;
- work with its clients to pursue, promote and develop sustainable business outcomes;
- promote sustainable practices;
- use its skills and influence to improve the built environment and to maintain the integrity and quality of the natural and cultural environments;
- hold its performance accountable to its staff through objective measurements;
- report on its sustainability performance and achievements; and
- operate within a management system that is registered as meeting the requirements of ISO 14001.

## Outcomes

In meeting these objectives, the firm will:

### For its core business

- comply with legal and other requirements that relate to its environmental aspects;
- provide value to clients by building upon its reputation for integrated design and a holistic approach to projects;
- deliver projects recognised for their sustainability credentials, in line with client expectations;
- evaluate projects with respect to their sustainability risks and opportunities and, where appropriate, work with the client to deliver a more sustainable outcome; and
- achieve performance that ensures the firm's economic, environmental and financial viability.

### For its people

- employ and retain staff who have a high degree of awareness and expertise in sustainability for all disciplines practised;
- provide ongoing education and training for all staff on sustainability issues relevant to the firm's business; and
- support innovative approaches to the implementation of sustainability strategies on projects.

### For its facilities

- endeavour to prevent pollution;
- aim to use resources efficiently and to minimise waste, usage of water, energy and other consumables;
- implement a strategy to move towards minimising carbon emissions in its operations; and
- implement a strategy for the firm to move towards sustainable procurement of the goods and services used in its operations.

### For its external relationships

- engage with organisations that practise sustainability and that enable the exchange of ideas and the promotion of sustainability leadership across its businesses; and
- implement a strategy to work on community projects that achieve sustainability goals.

## David Singleton

Arup Group Sustainability Director

17 September 2009



# Our business



▼ **Ninh Thuan** is a coastal province in Vietnam spreading over 3,000km<sup>2</sup>. Arup is conducting a strategic masterplan to deliver viable planning and urban design solutions for the future development of Ninh Thuan, paying particular attention to developing the clean energy industry. Our role in this challenging commission involves driving the prosperity of Ninh Thuan by developing a planning vision and formulating an effective masterplan that embraces the idea of sustainable growth. Our study will capitalise on Ninh Thuan's natural resources to generate a fully-integrated economy that is competitive on a provincial and national level.



▼ In 2009, Arup entered into an exclusive strategic partnership with the **C40** – a group of the world's largest cities committed to tackling climate change – and the Clinton Climate Initiative as a strategic adviser to aid climate change policy development and design. Under the terms of the agreement we are the sole strategic adviser to the C40 for an initial period of two years. This is a significant, high-profile relationship and unique in that Arup is the first and only private sector company to partner with the C40 during this two-year period. In September 2009, senior city officials, utility companies and city residents of Toronto came together with Arup's energy experts to the first in a series of global C40/Arup UrbanLife workshops to devise a plan that will allow all Toronto neighbourhoods to be as clean and green as possible. Arup will go on to host UrbanLife workshops in five other C40 cities, each addressing a specific challenge faced by the city.

The **Northern Alliance for Greenhouse Action (NAGA)** is a coalition of nine northern metropolitan councils in Melbourne, Australia (Cities of Banyule, Darebin, Hume, Manningham, Melbourne, Moreland, Nillumbik, Whittlesea and Yarra) and the Moreland Energy Foundation Ltd. Arup calculated and modelled the carbon emissions for the NAGA region and projected the emissions to 2020, considering regional growth. Furthermore, Arup identified opportunities for potential regional-scale solutions to reduce carbon emissions in the residential, commercial, industrial and transport sectors. The recommendations provide a roadmap for other Victorian councils and regional alliances. This process involved internal and external workshops, with carbon footprinting and climate change experts from across the firm and key industry organisations from the public and semi-public sector. The regional plan, *Towards Zero Net Emissions for the NAGA Region*, forms a partner document for Councils' climate action plans and provides NAGA's member councils with the opportunities to demonstrate their leadership and innovation, by extending and expanding the significant initiatives already underway in this region.

Arup has been commissioned by the **Hong Kong Government's Urban Renewal Authority (URA)** to formulate their Corporate Environmental Policy. The URA wants Arup to develop an action plan to reduce urban carbon emissions, and help Hong Kong adapt to climate change. The URA is particularly interested in Arup's take on green transportation (increased public transportation, reduced private transportation) and green buildings (low-carbon construction and operation).



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▼ The **Bond University Mirvac School of Sustainable Development** in Queensland, Australia is now rated 'world's best', having won the Royal Institution of Chartered Surveyors (RICS) global award for sustainability. The University's Mirvac School of Sustainable Development – the first higher education building in Australia to receive a six-star Green Star Design Rating – faced strong competition from Spain, France, Germany and the UK and took the top award. Arup guided the sustainability aspects of the design and development. The building is now leading the way for other universities in Australia, providing a benchmark in both quality of education and provision of sustainable teaching and learning environments.



Delivering innovative, sustainable solutions to clients to address global challenges, such as climate change, natural resource degradation and resource depletion.

Our business	Key Performance Indicators						Indicator derivation <i>Trend in performance</i>
	08-09	07-08	06-07	05-06	04-05	03-04	
Projects setting sustainability objectives (%)	23	12	Not measured				Aggregated from regional estimates based on Project Plans, Project Quality Plans and various databases. <i>Sustainability objectives apply to significantly more projects.</i>
Profit (% on turnover)	8.6	11.2	8.5	7.2	2.9	4.4	Profit on turnover (before tax and staff profit share). <i>Reasonable levels of profitability have been sustained through challenging economic circumstances.</i>
Investments (% of income)	2.4	2.7	2.6	1.9	1.7	1.8	Investment in the business and its people, normalised for the size of the business. <i>Investment levels have been maintained in challenging economic circumstances.</i>
Cash at bank (weeks of costs, before profit share)	7.9	8.1	6.6	6.9	5.3	5.2	Cash reserves normalised for size of the business. <i>Cash reserves have been maintained.</i>
Repeat clients (%)	62	70	74	57	52	40	Aggregated from regional client satisfaction surveys and various databases. <i>Level of repeat clients satisfactory despite business diversification and challenging economic times.</i>



▼ Led by Arup, **CABLED** – the Coventry and Birmingham Low Emission Vehicle Demonstrators consortium – is the largest of eight regional teams to succeed in the £25m Technology Strategy Board's Ultra Low Carbon Vehicle Demonstrator competition. The competition is the first phase in the Government's plans to deploy 1.7 million electric and ultra-low-carbon emission vehicles across the UK by 2020. CABLED was also the first to start vehicle trials in December 2009 with over 100 vehicles beginning trials on West Midlands roads within the next 12 months. The information gained from this project – the biggest of its kind in the world – will be an important contribution to the future plans of manufacturers and their supply chain, to develop low-carbon vehicles for the mass market.



▼ Arup is leading the **Platja de Palma Rejuvenation Study** – the redevelopment of a 1,000ha tourist area on the Mediterranean seafrent in Spain. The project aims to look for a better position for Mallorca beach to maintain its reputation in tourism in the future. The Spanish Cabinet is looking to this project to serve as an operational model that combines quality, competitiveness and sustainability in order to meet the challenges which global change and climate change represent for tourism. The study considers societal, economic and environmental sustainability factors, with particular concern for the consumption of limited natural resources, and looks at strategies for water, energy, waste and mobility.

# Our people

Like all our regions, the Australasia Region is undergoing a change management approach to embed sustainability across our business and advice to clients. As part of this process each business group has developed a sustainability action plan to understand the opportunity and value that sustainability presents for our business. In support of this process a group of over 60 **sustainability champions** (some pictured right) have been identified representing each business group in every office across the Region. In addition to this, to ensure a consolidated approach, 16 members comprise a smaller team of regional sustainability champions. This group is responsible for coordinating their business groups in developing and delivering a business-specific approach to sustainability across the Region.



The Energy Research Institute of the China National Development and Reform Commission has appointed **Stanley Yip**, Director of Planning and Development for Arup in China, as the Special Advisor to the CO<sub>2</sub> Emission Scenario Study for Mainland, Taiwan, Hong Kong and Macau.



We have a number of staff across the firm, who not only practice what they preach in how they conduct themselves for Arup, but also in how they conduct their personal lives. One of them is **Robin Haycock**. He is currently seconded to the newly formed Office for Low Emission Vehicles – a team responsible for accelerating the early market for ultra low-emission vehicles – and was instrumental in the creation and development of their remit. His job furthers his interests in societal change towards low carbon. He lives in a house in Peterborough that he returns to at the weekends via train or motorbike. During the week, he commutes from an off-grid narrow boat moored on the Thames. Central London moorings are hard to come by so it's currently 29km away from Westminster. He covers those 29km in around an hour on a carbon-fibre bicycle. His boat has two solar panels, a wind turbine and a large battery bank. Even with only a small fridge, it needs an occasional injection from the mains, but 90% of his needs are covered.

A global economic recession and the loss of billions of dollars of construction projects that continue through the architecture, engineering, and construction professions are not enough to quell interest in sustainable building design. So says the **2009 DesignIntelligence Sustainable Design Survey**. The survey, which draws data from architecture and design firms throughout the United States, finds that most firms claim a majority of their projects are environmentally responsible. Of particular interest in the survey were the individuals and organisations acknowledged as leading players – Arup was among the top five firms cited as “role models of green and sustainable design”. In the 2009 *DesignIntelligence* Multinational Design Firm Survey, Arup was among the top three “most admired U.S. Engineering firms”.

Staff from our Brisbane office have been planning and designing a prototype for an organic vegetable garden on the balcony of their office. The prototype – ‘**Grow your Own**’ – vegetable garden was officially launched on 24 November 2009 and was tied in with a sold-out food agriculture forum held on the same day. The garden provides a full, fresh salad bowl every fortnight for our staff, is low maintenance, is self-watering without the use of pumps, and is fertilised using Arup's organic kitchen waste. Its design and completion was an inspiring effort crossing many teams in the Brisbane office.





Creating a stimulating, equitable and rewarding work environment, while supporting the development of diverse, talented staff.

Our people	Key Performance Indicators						Indicator derivation <i>Trend in performance</i>
	08-09	07-08	06-07	05-06	04-05	03-04	
Women in the firm (all Grades) (%)	29	29	30	29	29	28	Based on staff at all grades. <i>Female participation rates have been maintained.</i>
Staff who have received relevant sustainability training (%)	17	16	Not measured				Based on training records and external accreditation for staff at all Grades in all regions (2008-09). <i>Inclusion of all regions (2008-09) suggests that minor improvement has occurred.</i>



► **ConnectWomen** is a network set up by Arup's Diversity and Inclusion Steering Group in our UK-Middle East Region to encourage and improve the opportunities for women in Arup to enable them to maximise their valued contribution to the firm, our clients and our industry. This network is open to all staff regardless of profession, gender or business background and is a key element of our ongoing strategy to ensure Arup is a business where women want to work, develop, succeed and stay. Four successful networking events were held in 2009. In March, four very different women who work at Arup spoke about their work-life balance. In June, **Trevor Phillips OBE**, Chair of the Equality and Human Rights Commission in the UK, suggested what we could do to make Arup a more attractive place for women to work and provided insight into the business case for retaining women's talent. In September, attendees gathered to hear **Deborah Frances-White**, a comedienne, actor and corporate trainer who stimulated thinking about how we can consciously control certain aspects of our body language to enhance our confidence and charisma. In December, very recent past-President of the Institution of Civil Engineers, **Dr Jean Venables**, past-President of the Institution of Structural Engineers, **Dr Sarah Buck**, and President of the Royal Institute of British Architects, **Ruth Reed** (pictured left to right above), gave accounts of their experiences as women in a male-dominated field, and offered top tips for making the workplace more attractive to women.



► **Anna Montag** in our Sydney office has won another award for her outstanding contribution to the Goodooga Aboriginal Communities Development Program. Anna was awarded the 2009 Project Management Institute Australian Chapters' Project Manager of the Year Award at a ceremony in August 2009. Anna spent four years leading the project management and design services for the project, which was implemented to improve health and living standards as well as provide training and employment opportunities to the indigenous community of Goodooga, NSW. This is the seventh award that Anna has received for her work on this project, including the National Association of Women in Construction's Award for Contribution to a Project's Development and the Australian Institute of Project Management's Community Service and/or Development Award.

# Our facilities

Our IT department has implemented some new initiatives to reduce energy use and reduce waste. **NightWatchMan** is a system that monitors computer power usage but also powers down non-active computers each evening in our offices in the UK, the Middle East and Continental Europe. Desktop computers are automatically shutdown each evening at 19:00, and during working hours, monitors go into standby after 20 minutes and hard disks go into standby after 10 minutes. **uniFLOW** (or follow-me-printing) – an integrated printer management system – has already realised a 30% saving on wasted prints in offices across the UK. Instead of directly printing to a photocopier, staff print directly to a specific print queue. They then walk up to any photocopier and retrieve their prints by simply swiping their ID badge or entering their staff ID number. We also delivered an award-winning **consolidated data system** that gives us hugely increased disk space with a drop in power consumption and overall running costs. In addition, we have consolidated over 200 physical servers onto a highly resilient VM Ware solution which virtualises our servers to help cope with increased demands for them. This has delivered a 25% reduction in power consumption in our server rooms.



As a global partner of The Climate Group, Arup fully supports its recently launched **Hong Kong Carbon Reduction Campaign** to promote a low-carbon lifestyle among individual employees. As a result, our Hong Kong office is running a year-long series of interactive events to catalyse individual behavioural changes towards a low-carbon personal lifestyle and to provide a platform for sharing and discussion. Each participant received a toolkit containing various low-carbon gadgets, and low-carbon tips are provided through an internal campaign website. Various activities have been organised to raise awareness and encourage participation including organic farming, a photo competition, monthly team awards, an excursion to see Hong Kong's biggest photovoltaic panel installation, a Best Ideas competition (for reducing carbon emissions), lunchtime talks and training sessions.



Arup in the UK has been recognised for our achievement in sustainable procurement with a **Gold Award** in the **Mayor of London's Green Procurement Code**. The Code, which has several hundred signatories, exists to challenge companies to actively reduce their environmental impact through responsible purchasing. An in-depth audit of Arup's approach to sustainable procurement highlighted our strengths in the key areas of strategy, policy, process, people and measurement. In addition, we were also 'Highly Commended' for the way we are embedding sustainability into our evolving procurement strategies. Arup's Common Purchasing Unit has developed a Sustainable Procurement Plan for the UK, outlining the firm's vision and strategy to ensure sustainability in the goods and services we procure.



Incorporating resource-efficient, sustainable approaches in our offices and our operating practices.

Our facilities	Key Performance Indicators						Indicator derivation <i>Trend in performance</i>
	08-09	07-08	06-07	05-06	04-05	03-04	
Staff working in offices with and EMS certified to ISO14001 (%)	70	68	34	43	40	41	Based on the number of staff working in EMS (ISO 14001) certified offices in all regions. <i>Certification to ISO 14001 in Europe Region continues to increase, increasing the global proportion.</i>
Carbon emissions per full-time employee per year (tCO <sub>2</sub> /employee/yr)	3.6	3.6	Not measured				Based on regional estimates of direct and indirect emissions (ie Scope 1 and 2) and including business travel (ie Scope 3) according to the World Resources Institute: 'The Greenhouse Gas Protocol – Corporate Accounting and Reporting'. <i>No trend identified.</i>
Total wastes generated per employee per year (kg)	120 <sup>1</sup>	Not measured					Based on monitoring of waste generation in Australasia, East Asia and Europe Regions. <i>No trend identified.</i>
Lost time accidents per 100,000 employees	200	156	107	94	119	59	Based on regional records of lost time accidents (previously reportable accidents 2003-07). <i>Improved awareness of, and attention to, Health and Safety is thought to explain the apparent increase in lost time accidents.</i>

<sup>1</sup> Excludes Americas Region

Arup's in-house **Global Environmental Aspects Register** (GEAR) aims to be a more comprehensive, faster and more user-friendly way for project managers in the UK to identify and mitigate environmental issues on a project. The GEAR database takes the user through a series of questions about the project and its location and automatically creates an aspects register for the project. It cross-references information that the project manager provides about the site and the potential impacts that could arise from the type of project described, relates the potential impacts to a series of standard mitigation measures and generates a list of recommendations for managing these environmental impacts that can be ranked by the project manager in order of priority. GEAR was recently used on the **Maryport Harbour Reconfiguration** in West Cumbria, UK. We were commissioned by Cumbria City Council to help revitalise the the local economy and enable the harbour to fulfil its potential as an environmental, social and economic asset for West Cumbria. A matrix was produced to compare different design options against the requirements of the project. GEAR was used to help identify potential risks and relevant legislation.

In December 2009, we reported our carbon footprint through the **Carbon Disclosure Project** (CDP) for the first time. The CDP is an independent, not-for-profit organisation which holds the world's largest database of corporate climate change information. Since its formation in 2000, the CDP has become the gold standard for carbon disclosure methodology and process, providing primary climate change data to the global market place. In responding as part of this year's reporting requirements, we provided a detailed analysis of emissions across Arup Group, and reporting to a level of detail and transparency not yet seen from many of our peers.



► Arup staff successfully installed a **living wall** in the San Francisco office reception area this year. The plants were selected for low water use, ability to thrive in low light conditions, and ability to improve indoor air quality. Prior to installation, the plants were strategically moved around the office to test their impact on the indoor air quality – specifically monitoring the levels of CO, CO<sub>2</sub>, and VOCs (volatile organic compounds) in the areas in question (such as print rooms). As the plants become more established in their new space, the living wall team continues to monitor air quality in the reception area, with lots of positive staff, client and visitor feedback.

# Our external relationships



▼ On 13 October 2009, Arup was very privileged to host an audience with **Dr Eva Schloss**, (pictured front-right with her daughter, **Jacky Hovelson**, far-left and **Gillian Walnes**, Executive Director of the **Anne Frank Trust**, front-left), holocaust survivor and posthumous step-sister of Anne Frank, in the first of a number of events as part of the UK-Middle East Region's Diversity and Inclusion Strategy, aimed at reinforcing a culture that respects and embraces our differences. The event was well attended, with more than 160 people from across 12 different locations. Eva's talk was inspiring and thought provoking, as demonstrated by the questions that followed on ethical projects, individual responsibility, forgiveness and where the line for freedom of speech should be drawn. The Anne Frank Trust, of which Eva is a co-founder, is committed to reminding others of the importance of challenging prejudice and to strive for a world where everyone is treated fairly. This aligns well with our founder, Ove Arup's, ideals for our firm: we should act honourably in our dealings with our own and other people, and we should eschew nepotism or discrimination.



▼ To both Arup and **Engineers Without Borders UK** (EWB-UK) it is critical that young people understand the importance of water resources and become inspired to protect them. Together, we developed an interactive classroom session to educate and engage 11 to 18 year olds, as part of EWB-UK's Water for the World programme which is now used in schools across the UK and many other parts of the world. Across the globe, we recently partnered with **Engineers Without Borders Australia** and the Centre of Appropriate Technology to assist in the design and construction of two small buildings on Bentinck Island – an amenities block and arts shelter – located near Mornington Island off the North Queensland coast. The key motivation for the construction of the amenities block is the fact that women elders who inhabit the island have to share the existing facilities with male visitors. Provision of additional male ablutions facilities will resolve this issue. The arts shelter will support the work of artists on the island and resolve a current lack of suitable space for undertaking artworks in the community. Art is a very important element of indigenous culture, the construction of such a building is likely to provide significant social and cultural benefits to the community.

Following our work with the **Climate Group** on **The Business Guide to the Low Carbon Economy: California**, Arup once again collaborated on two business guides for Australia – **The Business Guide to the Low Carbon Economy: Queensland** and **The Business Guide to the Low Carbon Economy: New South Wales** (NSW). The new guides provide practical steps for businesses to get on top of measuring and curbing greenhouse gas emissions from their operations. They offer useful case studies and information specific to Queensland and NSW so that businesses can evaluate their situations and develop appropriate measures to reduce greenhouse gas emissions while saving money at the same time. The advice and tools offered in the guides will help businesses prioritise different measures and develop the most cost-effective strategies.



In 2009, Arup became a Founding Partner of **Cambridge University's Programme for Sustainability Leadership** (CPSL). The CPSL works with business, government and civil society to build leaders' capacity to meet the needs of society and address critical global challenges. The partnership is expected to be an active and mutually beneficial relationship. It goes to the core of our sustainability commitment to develop new partnerships that enable the exchange of knowledge and ideas and ensure that such partnerships drive further improvements in sustainability within Arup and more widely. We also became a Lead Partner of Cambridge University's global Sustainable Cities Programme, a new work programme of the CPSL that aims to develop and spread best- and next-practice solutions to the most pressing urban development challenges faced by policy-makers and private sector providers of urban infrastructure, products and services.





Promoting sustainability, providing leadership in our local communities and helping to minimise the environmental impacts on society.

Our external relationships	Key Performance Indicators						Indicator derivation <i>Trend in performance</i>
	08-09	07-08	06-07	05-06	04-05	03-04	
<b>Charitable donations (£, to nearest £000)<sup>2</sup></b>	760	410	Not measured				Direct charitable donations in all regions, including those from the Ove Arup Charitable Trust. <i>Donations are targeted at 1% of management account profit.</i>
<b>Pro bono engagement (£ equivalent staff cost, to nearest £000)</b>	715	110	Not measured				Based on equivalent cost of pro bono staff engagement in all regions. <i>Increase due to an increase in and the improved recording of pro bono engagements.</i>

<sup>2</sup> Includes contributions through UK charitable trusts



Arup donates monies and resources up to an agreed budget to charitable causes each year. The causes generally serve the communities within which the firm operates, although some are of a global nature. We consider charitable causes that relate closely to our business, and support appropriate charities related to education, training, social care, health and welfare and that contribute towards disaster relief, or good works ventures. In 2009, **RedR**, **Engineers Against Poverty**, the **Red Cross** and **Médecins Sans Frontières** were among the charitable causes supported by the firm.

Changing cultural attitudes and behaviour, together with policy changes and the introduction of new technical solutions, are critical parts of adapting to, and tackling the consequences of, climate change. The 15th **United Nations Council of Parties (COP15)**, hosted by Copenhagen in December 2009, is crucial to this agenda with the objective to agree a new international climate change deal that replaces the Kyoto Protocol. Arup has joined over 950 companies from around the world in signing the **Copenhagen Communiqué** which calls for 'an ambitious, robust and equitable global deal on climate change that responds credibly to the scale and urgency of the crises facing the world today'. A series of side-events ran alongside the official negotiations at COP15, and Arup played a role in two of them. Culture|Futures built on an event which Arup hosted in collaboration with the Danish Cultural Institute and the Danish Embassy in Poznan during COP14. It continued the discussion on culture and climate change and its link with the principles of transitioning to an 'Ecological Age'. Arup Director, **Peter Head** gave a keynote speech and delivered his Brunel Lecture 'Entering the Ecological Age: The Engineer's Role' at the event. At the Copenhagen Climate Summit for Mayors, Arup Director **Mark Watts** led a roundtable discussion on Climate Change Action Plans, based on his experiences leading Arup's partnership with the C40 Cities Climate Leadership Group and Clinton Climate Initiative.



The Sabre Trust and Davis Langdon partnered with Arup to develop the design for the **Sabre Kindergarten School** in Dwabor, Ghana – a prototype that is sustainable, maintainable and affordable. Historically, the kindergarten sector has been underfunded: in many communities there are no dedicated classrooms, the children are taught under trees by community teachers who have never received any formal training, and without even basic government funding, no learning resources are available for the children's use. This project aims to tackle this huge shortage of kindergarten infrastructure, by designing and building a new prototype school for Ghana, which will provide education for 180 children. The final design was signed off by the Education Authority in the KEEA District and the villagers of Dwabor in April 2009. On completion of the build, we will review the prototype before the next one starts on site. It will be evaluated on affordability, functionality, acceptability, buildability and sustainability.



# Looking forward

In these tough economic times, it is all the more important for us to work together as a global firm of like-minded individuals to achieve our sustainability end-goals.

The Arup Group Board has responded to the firm's efforts by seeking to proactively embed sustainability across the firm. Beyond the changes to our Sustainability Policy in 2009, a modified sustainability framework has also been adopted for launch in 2010.

This modified framework results in one Arup Group Sustainability Strategy – instead of the separate regional strategies that we have currently. The Strategy sets out a framework of activity for our five regions, defining outcomes for the firm globally and will deliver our revised Policy in our operational regions through Regional Sustainability Plans. The Group Sustainability Strategy and Regional Sustainability Plans will take effect from 1 April 2010; regional strategies currently deployed are being adapted as input to these plans.

Several years of data collection now allows us to be in a position to better understand trends in our performance. We have proposed targets for 2011-12 and, as with our Strategy and Regional Operational Plans, we are working on a transitional programme to achieve these targets. The chart on the following page shows a summary of our performance against these key performance indicators for 2008-09 as well as our proposed targets for 2011-12.



Sustainability Policy Objectives	Key Performance Indicators	2008-09 Final	2011-12 Target
<b>Our business</b> <ul style="list-style-type: none"> <li>provide value to clients by building upon its reputation for integrated design and a holistic approach to projects</li> <li>deliver projects recognised for their sustainability credentials, in line with client expectations</li> <li>evaluate projects with respect to their sustainability risks and opportunities and, where appropriate, discuss these with the client</li> <li>achieve performance that ensures the firm's economic, environmental and financial viability</li> </ul>	Projects setting sustainability objectives (%)	23	50
	Profit (% on turnover)	8.6	– <sup>4</sup>
	Investments (% of income)	2.4	– <sup>4</sup>
	Cash at bank (weeks of costs, before profit share)	7.9	– <sup>4</sup>
	Repeat clients (%)	62	– <sup>4</sup>
<b>Our people</b> <ul style="list-style-type: none"> <li>employ and retain staff who have a high degree of awareness and expertise in sustainability for all disciplines practised</li> <li>provide continual education and training for all staff on sustainability issues relevant to the firm's businesses</li> <li>support innovative approaches to implementation of sustainability strategies on projects</li> </ul>	Women in the firm (%)	29	35
	Women in management positions (%) <sup>3</sup>	–	15
	Staff sustainability training (%)	17	35
<b>Our facilities</b> <ul style="list-style-type: none"> <li>maintain management systems to assist with implementation of sustainability objectives</li> <li>aim to use resources efficiently and to minimise waste, usage of water, energy and other consumables in the office environment</li> <li>develop a strategy to move towards minimising carbon emissions in its operations</li> <li>endeavour to prevent pollution within the scope of its activities</li> <li>develop a strategy for the firm to move towards sustainable procurement of the goods and services used in its operations</li> </ul>	Staff in offices with EMS to ISO14001 (%)	70	95
	Carbon emissions per employee	3.5	15% <sup>5</sup> reduction
	Total wastes per employee	120 <sup>1</sup>	10% <sup>5</sup> reduction
	Lost time accidents	200	15% <sup>5</sup> reduction
<b>Our external relationships</b> <ul style="list-style-type: none"> <li>partner with organisations that practise sustainability and that enable the exchange of ideas and the promotion of sustainability leadership across its businesses</li> <li>fund and work on community projects that achieve sustainability goals</li> </ul>	Charitable donations (£, to nearest £000) <sup>2</sup>	761k	1% of management account profit
	Pro-bono engagement (£ equivalent staff cost, to nearest £000)	715k	– <sup>4</sup>

<sup>1</sup> Excludes Americas Region    <sup>2</sup> Includes contributions through UK charitable trusts    <sup>3</sup> Women at Grades 7-9; this KPI to be introduced in 2010

<sup>4</sup> No target currently set    <sup>5</sup> Baseline year 2008-09







# Finance

The latest financial statements for Arup Group which follow in the next section show that last financial year remained robust for us despite the deterioration of the global economy. Headline figures show a 22% growth in turnover to £889m. This was achieved, despite difficult trading conditions, because of our long-term strategy of organic expansion of business offerings and diversification of geographic presence. We posted profit before tax and staff profit share of £77m – a margin of 8.6%.

The Group is 100% owned in trust by our employees. This ownership model provides us with a strong and resilient platform for the business. Based on our global performance, we were able to pay over £28m of profit back to all of our 10,000 staff during the financial year.

Our balance sheet has a strong underlying asset base with over £125m of cash held at the year end. Final salary pension commitments impact the reported position, but we remain committed to ensuring all these obligations are met and that the business remains robust for the long term.

In the year ahead we expect conditions to continue to be challenging in many of our markets, but we believe that our multidisciplinary capability, strong financial platform and global spread will enable us to continue to win and deliver high-quality projects around the world.







# Financial Statements 2009

Arup Group Ltd (Consolidated)

ARUP





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## Directors' report

The directors present their report together with the financial statements for the year ended 31 March 2009 which were approved by the Board of Directors on 22 October 2009.

The capital of the Company is divided into equity shares, which are held in trust for the benefit of the employees (past and present) of the Group, and voting shares that are held by the Ove Arup Partnership Charitable Trust.

### Principal activity

The Company and its subsidiaries practise in the field of consulting engineering services, in architecture and in other related professional skills.

### European Union branches

The Group has significant branches operating in the European Union countries of Poland and Romania.

### Review of the business and future developments

The Group turnover for the year increased by 22.5% (2008: 26.8%) and the Group made a total profit before tax, dividends and staff profit share of £76.6m (2008: £81.4m).

The performance and development of the Group is in line with the expectations of the directors.

The directors draw attention to the following matter that has had an impact on the reported performance in the current year:

- The results include the defined benefit pension scheme liabilities and assets as calculated under FRS 17. This shows as a net liability on the balance sheet of £98.9m (2008: £37.8m).

The principal risks and uncertainties facing the business include foreign exchange risk and risk resulting from the diverse geographical spread of the business and its ability to continue to secure new projects and deliver the performance of existing projects in line with management's objectives. To monitor these, the directors use the following financial key performance indicators (KPIs):

- Turnover and profit per person is a financial KPI used to monitor the continued contribution to the Company. In calculating this measure profit is stated before tax, dividends and profit share payable to staff. For the year ended 31 March 2009, turnover per person was £85k (2008: £81k) and profit per person was £8k (2008: £9k).
- Staff turnover is a key non-financial measure of business performance. For the year ended 31 March 2009, staff turnover was 10.0% (2008: 10.8%).

### Directors and their interests

The Directors of Arup Group Ltd during the year were as follows:

A J Belfield  
 R F Care  
 T G A Carfrae  
 A K C Chan  
 P G Dilley  
 T M Hill (Resigned 31/03/09)  
 G S Hodgkinson  
 L M Lui  
 J C Miles  
 M Raman  
 D J Singleton  
 D A Whittleton

No director has an interest in the shares of the Company (or any other member of the Group) other than through their interest as an employee of the Group in the employee trusts which own the equity shares of the Company.

### Auditors

The auditors, Horwath Clark Whitehill LLP, will retire at the forthcoming Annual General Meeting and offer themselves for re-appointment.

### Charitable donations

During the year the Group made charitable donations to UK beneficiaries amounting to £551k (2008: £281k).

### Employees

The maintenance of a highly skilled workforce is key to the future of the Company. Health and Safety matters are regularly reviewed by the directors and it is their policy to ensure that:

- full and fair consideration is given to all applications for employment made by disabled persons, having regard to their capabilities;
- when existing employees become disabled (whether from illness or accident) every reasonable effort is made to continue to provide suitable employment either in the same, or by training, in an alternative job; and
- disabled persons are given equal consideration for training, career development and opportunities for promotion within the Company.



## Directors' report (continued)

The Company is active in the field of employee communications and employees are encouraged to express their views on major policy issues. Each year employees are provided with a Chairman's Report and financial information. Employees receive the balance of Company profits each year after transfer to reserves.

### Statement of Directors' responsibilities

Company law requires the directors to prepare financial statements for each financial period which give a true and fair view of the state of affairs of the Company at the end of the year, and its profit or loss for the year then ended. In preparing those financial statements, the directors are required to:

- make judgements and estimates that are reasonable and prudent;
- select suitable accounting policies and then apply them consistently;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to assume that the Company will continue in business.

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with the Companies Act 1985. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention of fraud and other irregularities.

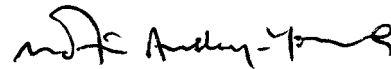
Legislation in the United Kingdom governing the preparation and dissemination of the accounts and the other information included in Annual Reports may differ from legislation in other jurisdictions.

The maintenance and integrity of the Company website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters, and accordingly the auditors accept no responsibility for any changes that may have occurred in the financial statements since they were initially presented on the website.

### Audit

So far as the directors are aware, there is no relevant audit information of which the Company's auditors are unaware, and the directors have taken all steps that ought to have been taken as directors, in order to make themselves aware of any relevant audit information, and to establish that the Company's auditors are aware of that information.

By Order of the Board



M J Ansley-Young  
Company Secretary

22 October 2009  
Registered Office: 13 Fitzroy Street, London W1T 4BQ

## Independent auditors' report

We have audited the Group and parent company financial statements ('the financial statements') of Arup Group Ltd for the year ended 31 March 2009 which comprise the Group Profit and Loss Account, the Group Note of Historical Cost Profits and Losses, the Group Statement of Total Recognised Gains and Losses, the Group and Company Balance Sheets, the Group Cashflow Statement and the related notes. These financial statements have been prepared in accordance with the accounting policies set out therein.

This report is made solely to the Group's shareholders, as a body, in accordance with Section 235 of the Companies Act 1985. Our audit work has been undertaken so that we might state to the Company's shareholders those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's shareholders as a body, for our audit work, for this report, or for the opinions we have formed.

### Respective responsibilities of directors and auditors

As described in the Statement of directors' responsibilities, the Company's Directors are responsible for the preparation of the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Our responsibility is to audit the financial statements in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland).

We report to you our opinion as to whether the financial statements give a true and fair view, the financial statements are properly prepared in accordance with the Companies Act 1985, and the information given in the Directors' report is consistent with the financial statements. We also report to you if, in our opinion, the Company has not kept proper accounting records, if we have not received all the information and explanations we require for our audit, or if information specified by law regarding directors' remuneration and other transactions is not disclosed.

We read the Directors' report and consider the implications for our report if we become aware of any apparent misstatements within it.

### Basis of audit opinion

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgments made

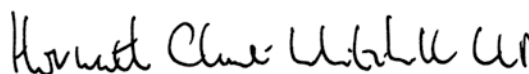
by the directors in the preparation of the financial statements, and of whether the accounting policies are appropriate to the Company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

### Unqualified opinion

In our opinion:

- the financial statements give a true and fair view, in accordance with United Kingdom Generally Accepted Accounting Practice, of the state of the Group's and the parent company's affairs as at 31 March 2009 and of the Group's profit for the year then ended;
- the financial statements have been properly prepared in accordance with the Companies Act 1985; and
- the information provided in the Directors' report is consistent with the financial statements.



Horwath Clark Whitehill LLP  
Chartered Accountants and Registered Auditors  
London  
22 October 2009



## Profit and loss account

		2009	2008
		£'000	£'000
	<b>Notes</b>		
<b>Turnover</b>	1c & 2	<b>888,794</b>	725,638
<b>Staff costs</b>	3	<b>(502,235)</b>	(393,038)
<b>Other operating charges</b>			
Charges from sub-consultants and other direct project costs		<b>(203,091)</b>	(174,509)
Accommodation		<b>(50,968)</b>	(39,182)
Depreciation		<b>(16,778)</b>	(10,264)
Communications and other overheads		<b>(69,798)</b>	(73,720)
		<b>(340,635)</b>	(297,675)
Operating costs		<b>(842,870)</b>	(690,713)
<b>Operating profit</b>	5	<b>45,924</b>	34,925
Profit on disposal of freehold property		-	5,157
Dividends received		<b>11</b>	-
Other finance income		<b>26</b>	7,185
Interest receivable		<b>2,107</b>	3,224
Interest payable	6	<b>(36)</b>	(123)
<b>Profit on ordinary activities before taxation</b>	2	<b>48,032</b>	50,368
Taxation on ordinary activities	1e & 7	<b>(13,531)</b>	(21,068)
<b>Profit for the financial year</b>	17 & 18	<b>34,501</b>	29,300

## Note of historical cost profits and losses

	2009	2008
	£'000	£'000
<b>Profit before tax</b>	<b>48,032</b>	50,368
Difference between profit on disposal based on historical and revalued cost	-	5,868
<b>Historical cost profit before tax</b>	<b>48,032</b>	56,236
<b>Tax on ordinary activities</b>	<b>(13,531)</b>	(21,068)
<b>Historical profit after tax</b>	<b>34,501</b>	35,168

## Statement of total recognised gains and losses

	2009	2008
	£'000	£'000
<b>Profit for the financial year</b>	<b>34,501</b>	29,300
Exchange translation losses	<b>(2,455)</b>	(9)
Realised surplus on revaluation of properties	-	5,868
Actuarial (losses)/gains recognised in the pension scheme	<b>(92,323)</b>	6,116
Deferred tax asset movement related to the actuarial gains/(losses)	<b>24,886</b>	(1,705)
<b>Total (losses)/gains recognised since last annual report</b>	<b>(35,391)</b>	39,570

The notes on pages 8 to 22 form part of these financial statements.

**Balance sheet – Arup Group Ltd and its subsidiary undertakings**

		2009 £'000	2008 £'000
	<b>Notes</b>		
<b>Fixed assets</b>			
Tangible assets	8	71,212	54,091
Unlisted investments at cost	10	<u>38</u>	<u>35</u>
		<b>71,250</b>	54,126
<b>Current assets</b>			
Debtors	11	281,020	240,476
Investments	12	282	273
Cash at bank and in hand		<u>125,673</u>	<u>103,891</u>
		<b>406,975</b>	344,640
<b>Creditors:</b>			
<b>Amounts falling due within one year</b>	13	<u>(341,035)</u>	<u>(286,425)</u>
<b>Net current assets</b>		<u>65,940</u>	<u>58,215</u>
<b>Total assets less current liabilities</b>		<b>137,190</b>	112,341
<b>Creditors:</b>			
<b>Amounts falling due after more than one year</b>			
Lease incentives		(729)	(1,341)
Finance leases		<u>(127)</u>	<u>(146)</u>
		<b>(856)</b>	(1,487)
<b>Provision for liabilities and charges</b>			
Deferred taxation	1e	<u>(199)</u>	-
<b>Net assets excluding pension liabilities</b>		<b>136,135</b>	110,854
Pension liability	25	<u>(98,869)</u>	<u>(37,847)</u>
<b>Net assets after pension liabilities</b>		<u>37,266</u>	<u>73,007</u>
<b>Share capital</b>	16	120	120
<b>Reserves</b>	17		
Capital reserve		3	3
Profit and loss account		36,319	71,710
Revaluation reserve		<u>824</u>	<u>1,174</u>
		<b>37,146</b>	72,887
<b>Shareholders' funds</b>	18	<u>37,266</u>	<u>73,007</u>

Approved and authorised for issue by the Board of Directors on 22 October 2009 and signed on its behalf:



P G Dilley  
Chairman

The notes on pages 8 to 22 form part of these financial statements.



**Balance sheet – Arup Group Ltd excluding subsidiary undertakings**

		2009 £'000	2008 £'000
	<b>Notes</b>		
<b>Fixed assets</b>			
Tangible assets	8	2,557	2,620
Investment in subsidiary undertakings	9	53,626	36,824
Unlisted investments at cost	10	4	4
		<u>56,187</u>	<u>39,448</u>
<b>Current assets</b>			
Debtors	11	36,444	42,372
<b>Creditors:</b>			
<b>Amounts falling due within one year</b>	13	<u>(60,187)</u>	<u>(50,852)</u>
<b>Net current liabilities</b>		<u>(23,743)</u>	<u>(8,480)</u>
<b>Net assets</b>		<u>32,444</u>	<u>30,968</u>
<b>Share capital</b>	16	120	120
<b>Reserves</b>	17		
Profit and loss account		<u>32,324</u>	<u>30,848</u>
<b>Shareholders' funds</b>		<u>32,444</u>	<u>30,968</u>

Approved and authorised for issue by the Board of Directors on 22 October 2009 and signed on its behalf:



P G Dilley  
Chairman

The notes on pages 8 to 22 form part of these financial statements.

**Cashflow statement**

		2009 £'000	2008 £'000
	<b>Notes</b>		
<b>Net cash inflows from operating activities</b>		<b>64,540</b>	<b>60,198</b>
<b>Returns on investment and servicing of finance</b>			
Interest received		2,107	3,224
Interest paid		(11)	(123)
Interest element of finance lease rental payments		(25)	-
Dividends received		11	-
<b>Net cash inflow on investment and servicing of finance</b>		<b>2,082</b>	<b>3,101</b>
<b>Taxation</b>			
Corporation tax paid		(16,904)	(9,489)
<b>Capital expenditure and financial investment</b>			
Payments to acquire fixed assets		(28,750)	(31,653)
Receipts from sales of fixed assets		671	14,500
Payments to acquire investments		-	(250)
Receipts from sales of investments		-	25
<b>Net cash outflow on capital expenditure and financial investment</b>		<b>(28,079)</b>	<b>(17,378)</b>
<b>Increase in cash</b>		<b>21,639</b>	<b>36,432</b>
<b>Reconciliation of net cashflow to movement in net funds</b>	15		
Net funds at 1 April		103,652	67,220
Movement in net funds in the period		21,639	36,432
<b>Net funds at 31 March</b>		<b>125,291</b>	<b>103,652</b>
<b>Notes to the cashflow statement</b>			
<b>Reconciliation of operating profit to net cashflow from operating activities</b>			
Operating profit		45,924	34,925
Depreciation charges		16,778	10,264
Gain on foreign exchange		(8,890)	(1,061)
Loss on disposal of fixed assets		111	141
Difference between pension charge and cash contributions		(8,589)	(5,385)
Decrease in current asset investments		-	32
Increase in debtors		(37,268)	(60,375)
Increase in creditors		56,474	81,657
<b>Net cash inflow from operating activities</b>		<b>64,540</b>	<b>60,198</b>

## 1 Accounting policies

### a) Basis of accounting

The financial statements have been prepared in accordance with all applicable accounting standards under the historical cost convention modified to include the revaluation of freehold properties.

### b) Basis of consolidation

The consolidated financial statements include the Company and all its subsidiary undertakings. Intragroup trading is eliminated within charges from sub-consultants and other direct project costs and communications and other overheads.

### c) Turnover

Turnover represents the value of work performed on contracts in the year.

### d) Depreciation

Fixed assets are written off over their estimated useful lives on a straight line basis. Provision for depreciation is made on all assets excluding buildings at a rate of 25% per annum on a straight line basis. Freehold buildings are depreciated on a straight line basis at 1% per annum. Expenditure on leasehold properties is written off over the period of the lease.

### e) Deferred taxation

In accordance with FRS 19, full provision is made for timing differences at the tax rates that are expected to apply in the periods in which the timing differences are expected to reverse, based on tax rates and laws that have been enacted or substantially enacted at the balance sheet date, in respect of timing differences which have arisen but not reversed at the balance sheet date. Timing differences are differences between the Company's taxable profits and its results as stated in the accounts, which are not permanent. Deferred tax is measured on a non-discounted basis.

In accordance with FRS 19, no deferred tax has been provided for on revalued amounts, where no binding agreement to sell any property has been entered into prior to the balance sheet date or where the gain on any property contracted to be sold will be rolled over into replacement assets.

Deferred tax assets are only recognised where they arise from timing differences where the recoverability is foreseen with reasonable certainty.

### f) Exchange rates

Assets and liabilities in foreign currency have been translated into sterling at year end exchange rates. The trading results of overseas operations have been translated using an average rate for the year.

Exchange differences on the translation of the results of overseas operations together with those on assets and liabilities in foreign currency are taken directly to reserves. All other exchange differences are included in the profit and loss account.

### g) Long term contracts

The value of long term contracts is based on recoverable costs plus attributable profit. Cost is defined as technical staff costs and related overheads plus project expenses.

As projects reach stages where it is considered that their outcome can be reasonably foreseen, proportions of the expected total profit are brought into the financial statements. Provision is made for all known and anticipated losses.

For contracts on which turnover exceeds fees rendered, the excess is included as amounts recoverable on contracts

(lump sum projects), and as accrued income, (time basis projects), within debtors. For contracts on which fees rendered exceeds turnover, the excess is included as fees in advance, within creditors.

### h) Other contracts

Other contracts are mostly time basis contracts which are valued at external charging rates. Profits are taken as services are performed.

### i) Pension costs

Contributions to the Group's defined contribution schemes are charged to the profit and loss account when they fall due.

The Group also operates two defined benefit schemes as described in note 25. Under FRS 17, the assets of the defined benefit pension schemes are measured at their fair (market) value at the balance sheet date and compared to the liabilities of the schemes, at the same date, measured on an actuarial basis using the projected unit method. The discount rate used is the rate of return at the balance sheet date on a high quality corporate bond of equivalent currency and term to the scheme liabilities. The extent to which the schemes' assets exceed/fall short of their liabilities is shown as a surplus/deficit in the balance sheet. The surplus/deficit is shown net of deferred taxation.

The increase in the present value of the pension schemes' liabilities arising as a result of employee service in the current period is charged to operating profit. Any increase in the present value of pension schemes' liabilities arising in the current period but as a result of employee service in prior periods is charged to operating profit on a straight line basis over the period in which the increases in benefit vest.

The amount of expected return on the schemes' assets and the increase during the period in the present value of the scheme liabilities arising from scheme liabilities being one year closer to payment are included as other finance income in the profit and loss account.

Actuarial gains and losses are reported in the statement of total recognised gains and losses.

### j) Leased assets

Where the Group has entered into finance leases, the obligations to the lessor are shown as part of the borrowings, and the rights to the corresponding assets are treated in the same way as fixed assets. Leases are regarded as finance leases where their terms transfer to the lessee substantially all the benefits and burdens of ownership, other than the legal right to title.

Rentals payable under operating leases are charged to the profit and loss account as incurred.

### k) Company profit and loss account

In accordance with the concession quoted under Section 230(3) of the Companies Act 1985, the Company profit and loss account has not been separately presented in these financial statements.



<b>2 Segmental report</b>		<b>2009</b>	<b>2008</b>
		<b>£'000</b>	<b>£'000</b>
<b>Turnover</b>			
United Kingdom		<b>372,550</b>	343,361
Asia		<b>125,765</b>	108,575
Australasia		<b>113,410</b>	99,036
Europe		<b>104,023</b>	81,232
Middle East & Africa		<b>94,055</b>	32,693
Americas		<b>78,991</b>	60,741
		<b>888,794</b>	725,638
<b>Profit before taxation</b>			
United Kingdom		<b>19,250</b>	16,524
Asia		<b>6,498</b>	5,226
Australasia		<b>5,860</b>	4,767
Europe		<b>5,375</b>	3,910
Middle East & Africa		<b>4,860</b>	1,574
Americas		<b>4,081</b>	2,924
		<b>45,924</b>	34,925
Net interest, other financing income and profit on disposal of freehold property		<b>2,108</b>	15,443
Group profit before taxation		<b>48,032</b>	50,368
<b>Net assets</b>			
	<b>Excluding pension liability</b>		
United Kingdom	<b>58,719</b>	<b>(36,431)</b>	18,244
Asia	<b>19,061</b>	<b>15,342</b>	21,012
Australasia	<b>4,131</b>	<b>4,131</b>	5,402
Europe	<b>1,189</b>	<b>1,189</b>	1,146
Middle East & Africa	<b>12,249</b>	<b>12,249</b>	10,052
Americas	<b>40,786</b>	<b>40,786</b>	17,151
	<b>136,135</b>	<b>37,266</b>	73,007

<b>3 Staff costs</b>		<b>2009</b>	<b>2008</b>
		<b>£'000</b>	<b>£'000</b>
Salaries		<b>392,011</b>	306,587
Staff profit sharing		<b>28,581</b>	25,197
Social security		<b>32,788</b>	27,248
Pension contributions		<b>20,039</b>	17,042
Other staff costs		<b>28,816</b>	16,964
		<b>502,235</b>	393,038

An analysis of the average number of persons employed by the Group is set out below:

	<b>Number</b>	<b>Number</b>
Engineering and technical staff	<b>8,277</b>	6,979
Administrative staff	<b>1,643</b>	1,502
Government site staff	<b>426</b>	448
	<b>10,346</b>	8,929

<b>4 Directors' remuneration</b>	<b>2009</b> <b>£'000</b>	2008 £'000
<b>Aggregate remuneration:</b>		
Aggregate emoluments paid	<u>4,086</u>	<u>2,782</u>
Aggregate contributions paid to money purchase schemes	<u>94</u>	<u>66</u>
<b>Number of Directors accruing pension benefits under:</b>	<b>Number</b>	Number
Defined benefit schemes	<u>9</u>	<u>8</u>
<b>Highest paid Director:</b>	<b>£'000</b>	£'000
Total emoluments excluding contributions paid to pension schemes	<u>421</u>	<u>307</u>
Accrued annual pension from defined benefit scheme as at 31 March	<u>59</u>	<u>43</u>
<b>5 Group operating profit</b>	<b>2009</b> <b>£'000</b>	2008 £'000
<b>This is stated after charging/(crediting):</b>		
During the year, the Group obtained the following services from the Company's auditor:		
Audit of parent company and consolidated accounts	99	101
Fees payable for other services:		
- Audit of the Company's subsidiaries, pursuant to legislation	369	301
- Tax services	486	212
Loss on disposal of fixed assets	111	141
Profit on foreign exchange from trading activities	(15,366)	(494)
Research and development costs	12,599	10,391
Operating leases - land & buildings	28,341	21,367
- plant & machinery	<u>998</u>	<u>740</u>
<b>6 Interest payable</b>	<b>2009</b> <b>£'000</b>	2008 £'000
Bank interest	1	9
Finance lease interest	25	8
Other interest	<u>10</u>	<u>106</u>
	<u>36</u>	<u>123</u>

<b>7 Taxation</b>	<b>2009</b> <b>£'000</b>	2008 £'000
<b>(a) Analysis of tax charge</b>		
The charge for taxation comprises:		
UK corporation tax for the year at 28% (2008: 30%)	<b>12,137</b>	12,809
Less: double tax relief	<b>(6,520)</b>	(7,407)
	<b>5,617</b>	5,402
Over provision of UK corporation tax in respect of prior years	<b>(253)</b>	(764)
	<b>5,364</b>	4,638
Non-UK tax for the current year	<b>5,712</b>	10,169
(Over)/under provision of non-UK tax in respect of prior years	<b>(479)</b>	1,129
Current tax charge	<b>10,597</b>	15,936
Deferred taxation for the current year	<b>3,140</b>	5,402
Under provision in respect of prior years	<b>(206)</b>	(492)
Restated opening balance due to change in rate of tax	<b>-</b>	222
<b>Total tax charge</b>	<b>13,531</b>	21,068
<b>(b) Factors affecting the tax charge for the year</b>		
The tax assessed for the year is lower than the standard rate of corporation tax in the UK (28%). The differences are explained below:		
Profit before tax	<b>48,032</b>	50,368
Profit on ordinary activities multiplied by the standard rate of corporation tax in the UK of 28% (2008: 30%)	<b>13,449</b>	15,110
Effects of:		
Permanent differences	<b>(606)</b>	1,629
Timing adjustments	<b>(893)</b>	(3,753)
Adjustments to tax charge in respect of prior years including non-UK tax charge	<b>(732)</b>	365
Small company rate	<b>-</b>	(1)
Unrelieved losses carried forward	<b>7</b>	1
Utilised brought forward losses	<b>-</b>	(160)
Unrelieved non-UK tax brought forward from prior years & offset in current period	<b>-</b>	(340)
(UK tax in excess of non-UK tax)/non-UK tax in excess of UK tax	<b>(628)</b>	3,076
Non-UK tax expensed	<b>-</b>	9
<b>Current tax charge</b>	<b>10,597</b>	15,936



**8 Tangible assets - Group**

	Freehold land & property £'000	Leasehold property £'000	Furniture, fittings & IT £'000	Motor vehicles £'000	Leased motor vehicles £'000	Total £'000
<b>Cost or valuation</b>						
Balance at 1 April 2008	1,250	28,963	87,098	1,141	352	118,804
Revaluation	(350)	-	-	-	-	(350)
Additions during the year	-	9,337	19,301	112	-	28,750
Disposals during the year	-	(218)	(2,659)	(64)	(76)	(3,017)
Adjustment for exchange differences	-	3,553	9,917	145	22	13,637
<b>Balance at 31 March 2009</b>	<b>900</b>	<b>41,635</b>	<b>113,657</b>	<b>1,334</b>	<b>298</b>	<b>157,824</b>
<b>Depreciation</b>						
Balance at 1 April 2008	-	10,293	53,746	523	151	64,713
Charge for the year	-	4,700	11,814	220	44	16,778
Eliminated in respect of disposals	-	(177)	(1,967)	(28)	(62)	(2,234)
Adjustment for exchange differences	-	923	6,342	82	8	7,355
<b>Balance at 31 March 2009</b>	<b>-</b>	<b>15,739</b>	<b>69,935</b>	<b>797</b>	<b>141</b>	<b>86,612</b>
<b>Net book value at 31 March 2009</b>	<b>900</b>	<b>25,896</b>	<b>43,722</b>	<b>537</b>	<b>157</b>	<b>71,212</b>
Net book value at 31 March 2008	1,250	18,670	33,352	618	201	54,091

**Revalued assets**

The freehold property held by the Group was externally valued at £1.25m by Strutt & Parker, International Property Consultants. The valuation was carried out as at 31 January 2006 and was based on market value, as defined by the RICS Appraisal and Valuations Standards (Red Book) 5th Edition. The freehold property was valued, on an interim basis, on 10 March 2009 at £0.9m by an independent chartered surveyor. Had the freehold property not been revalued the net book value based on original cost would have been £76k.

**8 Tangible assets - Company**

	Leasehold property £'000
<b>Cost or valuation</b>	
Balance at 1 April 2008	3,790
<b>Balance at 31 March 2009</b>	<b>3,790</b>
<b>Depreciation</b>	
Balance at 1 April 2008	1,170
Charge for the year	63
<b>Balance at 31 March 2009</b>	<b>1,233</b>
<b>Net book value at 31 March 2009</b>	<b>2,557</b>
Net book value at 31 March 2008	2,620

**Leasehold property**

Included in the leasehold property of the Group and Company is long leasehold property at a cost of £3.6m (2008: £3.6m) and accumulated amortisation of £1.1m (2008: £1.1m).

## 9 Subsidiary undertakings

The companies noted below were all wholly owned by Arup Group Ltd at 31 March 2009, unless stated otherwise. The operating companies were all engaged in the same principal activities as the parent company.

<b>Direct holdings:</b>	<b>Country of incorporation</b>	<b>Indirect holdings:</b>	<b>Country of incorporation</b>
Arup Americas Inc	USA	Arup Associates Ltd	England & Wales
Arup Botswana Ltd	England & Wales	Arup Canada Inc	Canada
Arup bv	Netherlands	Arup doo	Serbia
Arup China Ltd	Hong Kong	Arup Engineering Design and Consulting Services India Pte Ltd	India
Arup Consulting Engineers EPE	Greece	Arup Environmental Consultants Pty Ltd	Australia
Arup Corporate Finance Ltd	England & Wales	Arup Gulf Ltd	England & Wales
Arup GmbH	Germany	Arup International Ltd	England & Wales
Arup International Consultants (Shanghai) Co Ltd	China	Arup Ltd	England & Wales
Arup Italia Srl	Italy	Arup New Zealand Ltd	New Zealand
Arup Kuwait Ltd	England & Wales	Arup North America Ltd	England & Wales
Arup Muhendislik ve Musavirlik LS	Turkey	Arup Pacific Pty Ltd	Australia
Arup Partner Pty Ltd	Australia	Arup Services New York Ltd	England & Wales
Arup Pensions Administration Ltd	England & Wales	Arup Texas Inc	USA
Arup Pty Ltd	Australia	Arup USA Inc	USA
Arup SIGMA Ltd	Mauritius	Arup Vietnam Ltd	Vietnam
Arup Singapore International Ltd	England & Wales	Broomco (1469) Ltd	England & Wales
Arup Singapore Pte Ltd	Singapore	Heathrow Hub Property Ltd	Guernsey
Fitzroy Insurance Services Ltd	Guernsey	OASYS Ltd	England & Wales
Heathrow Hub Ltd (83% holding)	England & Wales	Ove Arup & Partners Detroit Ltd	England & Wales
Ove Arup & Company Libya Ltd	England & Wales	Ove Arup & Partners Ltd	England & Wales
Ove Arup & Partners Danmark AVS	Denmark	Ove Arup & Partners PC	USA
Ove Arup & Partners Hong Kong Ltd	England & Wales	Ove Arup & Partners Scotland Ltd	Scotland
Ove Arup & Partners International Ltd	England & Wales	Rossmore Dempsey & Company Ltd	England & Wales
Ove Arup & Partners Isle of Man Ltd	Isle of Man	Rossmore MCA Ltd	England & Wales
Ove Arup & Partners Japan Ltd	England & Wales	Rossmore Turner Lombard Ltd	England & Wales
Ove Arup & Partners Korea Ltd	Republic of Korea		
Ove Arup & Partners Poland Sp z o o	Poland		
Ove Arup & Partners SA	Spain		
Ove Arup & Partners Thailand Ltd	England & Wales		
Ove Arup (Thailand) Ltd	Thailand		
Ove Arup Incorporated	England & Wales		
Ove Arup Partnership Ltd	England & Wales		
Rossmore Group Ltd	England & Wales		

**9 Subsidiary undertakings (continued)**

£'000

**Movement of investment**

Cost at 1 April 2008	<b>36,824</b>
Additions	<b>16,802</b>
<b>Cost at 31 March 2009</b>	<b>53,626</b>

**10 Unlisted investments at cost**

	<b>Country of incorporation</b>
1 Ordinary Share of £1 in Ovarpart Nominee Ltd	England & Wales
100 Ordinary Shares of 1.27 each in Arup Ireland Partner Ltd	Ireland
2 shares of £1 each in The Arup Partnerships Trustees Ltd	England & Wales
4 Ordinary Shares of US\$1 each in Arup Africa Inc	Mauritius
50 Ordinary Shares of 10,000 Riyals each in Arup Iran SSK	Iran
1,250 Ordinary Shares of £1 each in Architecture Today Plc	England & Wales
105,800 Ordinary Shares of 25p each in London & Continental Railways Ltd	England & Wales
30,000 Ordinary Shares of 1p each in St Helena Leisure Corporation Ltd	England & Wales
201 Ordinary Shares of A\$340.90 each in Balu Pty Ltd	Australia

**11 Debtors**

£'000

	2009		2008	
	Group	Company	Group	Company
Amounts recoverable on contracts	44,742	4,518	38,458	5,213
Trade debtors	171,782	6,419	150,359	14,576
Amounts owed by Group undertakings	-	25,407	-	22,483
Foreign tax recoverable	6,880	-	660	-
Deferred taxation	2,892	-	2,752	-
Corporation tax recoverable	3,447	-	6,675	-
Other debtors	9,628	-	7,801	-
Prepayments and accrued income	41,649	100	33,771	100
	<b>281,020</b>	<b>36,444</b>	<b>240,476</b>	<b>42,372</b>

**12 Current asset investments**

£'000

	2009		2008	
	Group	Company	Group	Company
Unlisted investment	282	-	273	-



**13 Creditors**

£'000

	2009		2008	
	Group	Company	Group	Company
<b>Amounts falling due within one year</b>				
Fees in advance	215,719	-	167,470	-
Bank overdraft	190	-	23	-
Trade creditors	17,999	-	18,731	-
Amounts owed to Group undertakings	-	54,952	-	44,455
Amounts due on finance leases within one year	65	-	70	-
Provision for foreign tax	1,539	-	5,375	-
Corporation tax	5,081	2,686	3,884	2,840
Taxation and social security costs	12,040	-	10,226	-
Other creditors	8,836	854	17,670	2,173
Accruals and deferred income	79,566	1,695	62,976	1,384
	<b>341,035</b>	<b>60,187</b>	<b>286,425</b>	<b>50,852</b>

**14 Deferred taxation - Group**

£'000

	2009		2008	
	Provided	Unprovided	Provided	Unprovided
Timing differences due to accelerated taxation depreciation allowances	543	346	1,168	-
Short term timing differences	2,150	308	1,584	-
	<b>2,693</b>	<b>654</b>	<b>2,752</b>	<b>-</b>
Movement of deferred tax provision:				
Balance at 1 April	2,752		2,715	
Under provision of deferred tax in respect of previous years	206		492	
	<b>2,958</b>		<b>3,207</b>	
Movement in opening balance due to change in rate of tax	-		(222)	
<b>Restated opening balance</b>	<b>2,958</b>		<b>2,985</b>	
Charge for the year	(3,140)		(5,402)	
Less: Deferred tax on Pension Schemes deficits/surpluses	2,442		5,044	
Exchange rate difference	433		125	
<b>Balance at 31 March</b>	<b>2,693</b>		<b>2,752</b>	
Deferred tax asset	2,892		2,752	
Deferred tax liability	(199)		-	
	<b>2,693</b>		<b>2,752</b>	

**15 Analysis of changes in net funds**

£'000

	At 1 April 2008	Cashflow	At 31 March 2009
Cash at bank and in hand	103,891	<b>21,782</b>	<b>125,673</b>
Overdrafts	(23)	<b>(167)</b>	<b>(190)</b>
	<u>103,868</u>	<u>21,615</u>	<u>125,483</u>
Finance leases	(216)	<b>24</b>	<b>(192)</b>
	<u>103,652</u>	<u>21,639</u>	<u>125,291</u>

**16 Share capital**2009  
£'0002008  
£'000**Group and Company****Authorised:**

200 voting shares of £1 each (2008: 200)

-

-

999,800 equity shares of £1 each (2008: 999,800)

1,0001,0001,0001,000**Allotted, called up and fully paid:**

65 voting shares of £1 each (2008: 65)

-

-

120,000 equity shares of £1 each (2008: 120,000)

120120120120**17 Reserves**

£'000

	Group			Company
	Capital reserve	Property revaluation	Profit and loss account	Profit and loss account
Balance at 1 April 2008	<b>3</b>	<b>1,174</b>	<b>71,710</b>	<b>30,848</b>
Retained profit for the financial year	-	-	<b>34,501</b>	<b>1,476</b>
Actuarial gain recognised in the pension schemes	-	-	<b>(92,323)</b>	-
Deferred tax liability movement related to the actuarial gain	-	-	<b>24,886</b>	-
Exchange translation differences	-	-	<b>(2,455)</b>	-
Revaluation of freehold property	-	<b>(350)</b>	-	-
<b>Balance at 31 March 2009</b>	<u><b>3</b></u>	<u><b>824</b></u>	<u><b>36,319</b></u>	<u><b>32,324</b></u>
Profit and loss reserve excluding pension liability			<b>135,188</b>	
Pension liability			<b>(98,869)</b>	
Profit and loss reserve			<u><b>36,319</b></u>	

**18 Reconciliation of movements in shareholders' funds - Group**

	2009 £'000	2008 £'000
Balance at 1 April	73,007	39,304
Revaluation reserve	(350)	-
Retained profit for the financial year	34,501	29,300
Exchange translation difference	(2,455)	(8)
Actuarial (loss)/gain recognised in the pension schemes	(92,323)	6,116
Deferred tax asset movement related to the actuarial gain	24,886	(1,705)
	<u>37,266</u>	<u>73,007</u>
Closing shareholders' funds	<u>37,266</u>	<u>73,007</u>
Shareholders' funds excluding pension scheme liabilities	136,135	110,854
Pension scheme liabilities	(98,869)	(37,847)
	<u>37,266</u>	<u>73,007</u>
<b>Closing shareholders' funds</b>	<b><u>37,266</u></b>	<b><u>73,007</u></b>

**19 Trust monies**

The Group operates a number of bank accounts which are maintained in the name of Group companies in Australia on behalf of third party clients. These accounts are not available to meet any liabilities of the Group and are therefore excluded from the consolidated balance sheet. The total of such accounts at 31 March 2009 was £8.9m (2008: £8.4m).

**20 Contingent liabilities**

The Company has guaranteed bond support facilities granted to other companies in the Group. The guarantee is supported by a secured debenture dated 1 June 1998. No borrowings were outstanding as at 31 March 2009.

**21 Capital commitments**

£'000

	2009		2008	
	Group	Company	Group	Company
Contracted for	<u>229</u>	<u>-</u>	<u>828</u>	<u>-</u>

**22 Other financial commitments**

£'000

The Group and Company have the following annual property leasing commitments, at the year end, in respect of leases expiring as follows:

	2009		2008	
	Group	Company	Group	Company
Within one year	4,679	-	980	-
In two to five years	12,145	-	9,654	-
After five years	<u>18,457</u>	<u>-</u>	<u>18,100</u>	<u>-</u>



## 23 Ultimate controlling party

Arup Group Ltd is owned by the Ove Arup Partnership Employee Trust, the Ove Arup Partnership Charitable Trust and the Arup Service Trust.

## 24 Related party transactions

The Company and its wholly owned subsidiaries transact with each other in the normal course of business. These transactions are not disclosed, in accordance with FRS 8 paragraph 3, as the transactions and balances between Group entities have been eliminated on consolidation.

## 25 Pension commitments

The Group operates a UK registered and a Hong Kong registered defined benefit retirement scheme for employees.

### UK Registered Scheme

The Company operates a UK registered, contributory, defined benefit retirement scheme for employees. Contributions to the scheme are made in accordance with the advice of independent qualified actuaries on the basis of triennial valuations. The most recent valuation was at 31 March 2007 using the projected unit method. The actuarial valuation of the scheme's assets at 31 March 2007 on an ongoing basis represented 92% of the actuarially calculated liabilities for benefits that had accrued to members and the scheme's assets had a market value of £463.5m at that date. The most significant assumptions made by the actuary in carrying out this valuation were that the investment return would be 7.53% pre-retirement and that salary inflation would be 3.8% pa. There was an employer's contribution for the year to 31 March 2009 of £17.3m (2008: £15m). No special employer's contribution was made during the year to 31 March 2009 (2008: £0). The next actuarial valuation will be carried out as at 31 March 2010.

The valuation position of this scheme was reassessed at 31 March 2009 by a qualified independent actuary for the purposes of the financial reporting standard FRS 17.

### Hong Kong Registered Scheme

The Company operates a defined benefit scheme in Hong Kong. Contributions to the scheme are made in accordance with the advice of independent qualified actuaries on the basis of regular actuarial valuations. The most recent valuation was at 1 April 2008 using the attained age method. The actuarial valuation of the scheme's assets at 1 April 2008 on an ongoing basis represented 120% of the liabilities that had accrued to members and had a market value of approximately £22 million at that date. The most significant assumption made by the actuary in carrying out this valuation was that the investment return would be 6% per year. There was an employer's contribution for the year to 31 March 2009 of £1.9m (2008: £1.6m). The next actuarial valuation will be carried out as at 1 April 2011.

**25 Pension commitments (continued)****Assets in the scheme and the expected rates of return at 31 March:**

	2009	Long term rate of return expected	
		UK	Hong Kong
		2008	2009
Equities and property	8.00%	7.75%	8.00%
Bonds	5.00%	5.00%	5.00%
Cash including net current assets	5.00%	5.00%	5.00%

	2009	Value of assets in the schemes	
		UK	Hong Kong
	2008	2009	2008
	£'m	£'m	£'m
Equities and property	303.4	407.6	15.0
Bonds	49.6	36.5	4.5
Cash including net current assets	6.9	9.6	1.0
Total market value of assets	359.9	453.7	20.5
Present value of defined benefit obligation	(492.0)	(511.8)	(24.0)
(Deficit)/surplus in the scheme	(132.1)	(58.1)	(3.5)
Less: Related deferred tax asset (28%:2008: 28%)	37.0	16.3	(0.2)
<b>Net scheme (liability)/asset</b>	<b>(95.1)</b>	<b>(41.8)</b>	<b>(3.7)</b>

**Major categories of scheme assets as a percentage of total scheme assets:**

	2009	UK		Hong Kong	
		2008	2009	2008	2009
Equities and property	84%	90%	73%	71%	
Bonds	14%	8%	22%	22%	
Cash including net current assets	2%	2%	5%	7%	
	100%	100%	100%	100%	

	2009	UK		Hong Kong	
		2008	2009	2008	2009
	£'m	£'m	£'m	£'m	
<b>Amounts recognised in the profit and loss account:</b>					
Current service cost	(8.8)	(9.8)	(1.6)	(1.5)	
Interest on obligation	(34.9)	(29.9)	(1.4)	(1.0)	
Expected return on plan assets	34.3	36.4	2.0	1.7	
Net charge	(9.4)	(3.3)	(1.0)	(0.8)	
Actual return on scheme assets	(103.9)	(17.9)	(1.8)	1.0	

**25 Pension commitments (continued)**

	UK		Hong Kong	
	2009 £'m	2008 £'m	2009 £'m	2008 £'m
<b>Movement of (deficit)/surplus during the year</b>				
(Deficit)/surplus in scheme at 1 April	<b>(58.1)</b>	(74.9)	<b>5.7</b>	3.8
Movement in the year:				
Current service cost	<b>(8.8)</b>	(9.8)	<b>(1.6)</b>	(1.5)
Employer's contributions	<b>17.3</b>	15.0	<b>1.9</b>	1.6
Interest cost	<b>(34.9)</b>	(29.9)	<b>(1.4)</b>	(1.0)
Expected return on scheme assets	<b>34.3</b>	36.4	<b>2.0</b>	1.7
Actuarial (loss)/gain	<b>(81.9)</b>	5.1	<b>(10.4)</b>	1.0
Adjustment for exchange difference	-	-	<b>0.3</b>	0.1
(Deficit)/surplus in scheme at 31 March	<b>(132.1)</b>	(58.1)	<b>(3.5)</b>	5.7

One of the main factors contributing to the increase in the UK scheme deficit and the change from surplus to deficit in the Hong Kong scheme was that the actual return earned on the assets was below the expected return for the year.

	UK		Hong Kong	
	2009 £'m	2008 £'m	2009 £'m	2008 £'m
<b>Reconciliation of the present value of the defined benefit obligation:</b>				
Present value of defined benefit obligation at 1 April	<b>511.8</b>	538.5	<b>16.4</b>	17.1
Current service cost	<b>8.8</b>	9.8	<b>1.6</b>	1.5
Interest cost	<b>34.9</b>	29.9	<b>1.4</b>	1.0
Members' contributions	<b>8.8</b>	7.5	-	-
Actuarial gain on scheme liabilities	<b>(56.3)</b>	(59.4)	<b>(0.4)</b>	(1.5)
Benefits paid	<b>(16.0)</b>	(14.5)	<b>(1.7)</b>	(1.4)
Adjustment for exchange difference	-	-	<b>6.7</b>	(0.3)
Present value of defined benefit obligation at 31 March	<b>492.0</b>	511.8	<b>24.0</b>	16.4
<b>Reconciliation of fair value of scheme assets:</b>				
Fair value of scheme assets at 1 April	<b>453.7</b>	463.6	<b>22.1</b>	20.9
Expected return on scheme assets	<b>34.3</b>	36.4	<b>2.0</b>	1.7
Actuarial loss on scheme assets	<b>(138.2)</b>	(54.3)	<b>(10.8)</b>	(0.5)
Adjustment for exchange difference	-	-	<b>7.0</b>	(0.2)
<b>Actual return on scheme assets</b>	<b>(103.9)</b>	(17.9)	<b>(1.8)</b>	1.0
Employer contributions	<b>17.3</b>	15.0	<b>1.9</b>	1.6
Members' contributions	<b>8.8</b>	7.5	-	-
Benefits paid	<b>(16.0)</b>	(14.5)	<b>(1.7)</b>	(1.4)
<b>Fair value of scheme assets at 31 March</b>	<b>359.9</b>	453.7	<b>20.5</b>	22.1

**25 Pension commitments (continued)****Principal actuarial assumptions at the balance sheet date (expressed as weighted averages):**

	UK		Hong Kong	
	2009	2008	2009	2008
<b>At 31 March</b>				
Future average rate of increase in salaries	<b>3.8%</b>	4.5%	<b>4.5%</b>	4.5%
Future average rate of increase for pensions in payment and deferred pensions	<b>2.8%</b>	3.5%	<b>N/A</b>	N/A
Future average rate used to discount liabilities	<b>7.0%</b>	6.8%	<b>7.0%</b>	6.8%
Price inflation assumption	<b>2.8%</b>	3.5%	<b>3.5%</b>	3.5%
Pension increases				
- Pre 88 Guaranteed Minimum Pension	<b>0.0%</b>	0.0%	<b>N/A</b>	N/A
- Post 88 Guaranteed Minimum Pension	<b>2.3%</b>	2.8%	<b>N/A</b>	N/A
- NGMP accrued before 01/10/2006 (5%LPI)	<b>2.8%</b>	3.5%	<b>N/A</b>	N/A
- Pension accrued after 31/09/2006 (2.5%LPI)	<b>2.0%</b>	2.4%	<b>N/A</b>	N/A

NGMP – National Guaranteed Minimum Pension  
LPI – Limited Price Indexation

**Mortality 2008 & 2009**

	UK		Hong Kong	
	PNA00 birth year mortality tables using the 92 series medium cohort projections, allowing for minimum improvements in mortality of 1% pa.		Mortality (%) Hong Kong Life Table 2001	
	Age		Male %	Female %
	25		0.062	0.024
	30		0.070	0.030
	35		0.083	0.042
	40		0.127	0.070
	45		0.205	0.112
	50		0.332	0.172
	55		0.557	0.270
	60		0.907	0.409

**Cash commutation 2008 & 2009**

	UK	Hong Kong
	30% of members' pensions assumed to be taken as cash.	N/A

**Assumed life expectations on retirement at age 65 for the UK and age 60 for Hong Kong:**

		UK		Hong Kong	
		2009	2008	2009	2008
		Number of Years		Number of Years	
Retiring today	Males	<b>22.30</b>	22.20	<b>21.42</b>	21.42
	Females	<b>24.70</b>	24.60	<b>25.94</b>	25.94
Retiring in 20 years	Males	<b>24.20</b>	24.10	<b>21.42</b>	21.42
	Females	<b>26.60</b>	26.50	<b>25.94</b>	25.94

The assumptions used by the actuary are the best estimates chosen from a range of possible actuarial assumptions.



**25 Pension commitments (continued)**

	<b>2009</b>	2008	2007	2006	2005
<b>UK Registered Scheme</b>	<b>£'m</b>	£'m	£'m	£'m	£'m
<b>History of experience gains and losses</b>					
Defined benefit obligation	<b>(492.0)</b>	(511.8)	(538.5)	(504.4)	(422.9)
Scheme assets	<b>359.9</b>	453.7	463.6	405.2	310.6
Scheme deficit	<b>(132.1)</b>	(58.1)	(74.9)	(99.2)	(112.3)
Experience adjustments on plan liabilities	<b>11.9</b>	(5.0)	(20.6)	(11.2)	(0.9)
Experience adjustments on plan assets	<b>(138.2)</b>	(54.3)	(5.4)	(54.5)	(16.4)
<b>Hong Kong Registered Scheme</b>					
	<b>2009</b>	2008	2007	2006	2005
<b>Hong Kong Registered Scheme</b>	<b>£'m</b>	£'m	£'m	£'m	£'m
<b>History of experience gains and losses</b>					
Defined benefit obligation	<b>(24.0)</b>	(16.4)	(17.1)	(18.0)	(14.0)
Scheme assets	<b>20.5</b>	22.1	20.9	19.7	14.9
Scheme (deficit)/surplus	<b>(3.5)</b>	5.7	3.8	1.7	0.9
Experience adjustments on plan liabilities	-	-	-	-	0.8
Experience adjustments on plan assets	<b>(10.8)</b>	(0.5)	1.5	1.3	-

**Estimated contributions**

The employer's best estimate of contributions to be paid to the scheme next year are:

	<b>UK</b>	<b>Hong Kong</b>
	<b>£'m</b>	<b>£'m</b>
Employer	17.0	1.7
Employees	9.0	-
	<b>26.0</b>	<b>1.7</b>

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