CB RICHARD ELLIS EUROPEAN DATA CENTRES



DATA CENTRE MARKET OPINION & REVIEW

FOREWORD



Welcome to our second quarter European Data Centre Market review.

Although we witnessed a slow start to 2008 in the London market, we continued to see demand in the other European tier 1 cities. Our results this quarter show that we have seen take-up levels return in London, both in the CNH and shell markets. The continued growth in the CNH market is illustrative of underlying demand in the data centre market.

The difficulty in the capital markets has helped to constrain supply and as such the market has not been flooded with stock, which has helped maintain a healthy market equilibrium. The difficulty in obtaining funding for projects means that pre-lets are a prerequisite for any large scale build-outs, given the capital-intensive nature of any such project and as such we expect the equilibrium to continue in the medium term.

Whilst the full impact of the credit crunch is unclear it is evident that the consequential restraint it will place on IT budgets will lead to occupiers procuring on a less capital intensive basis. A requirement for opex solutions to support sagging balance sheets means that the market opportunities open to third party CNH operators and systems integrators will undoubtedly grow.

I hope you find our Market review and opinion interesting and valuable and please do let me know if you have any feedback so that we can continue to improve our reporting to meet your needs.

Best regards

Andrew Jay Head of Technology Practice Group, EMEA

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EUROPEAN DATA CENTRES MARKET OPINION

OCTOBER 2008

HOT TOPICS

- ► COLOCATION GROWTH REMAINS MUTED
- DEVELOPERS AND INVESTORS QUIET
- ► CARRIERS AND SYSTEM INTEGRATORS ACTIVE
- ► RETAIL END-USER DOMINANT
- ▶ POWER PROBLEMS PERSIST
- ▶ IT SPENDING TO HOLD UP

Despite the continued downturn witnessed across the European economic landscape since our July edition, the data centre market continues to record levels of activity which suggest there remains a good balance between supply and demand. Whilst carrier neutral colocation occupiers show only a mild appetite for more expansion – preferring to concentrate on fitting and filling their current portfolios – IT services companies and carriers continue to take more space to service what appears to be a growing enterprise client list.

Power remains the key focus of the industry, although according to survey evidence, corporate Europe still needs to improve its green credentials. The continued growth in use of virtualisation and cloud computing models, however, should help IT users to identify strategies to increase their efficiency and reduce carbon footprints.

HIGHLIGHTS

- Whilst carrier neutral colocation suppliers appear to remain buoyant, announcements of data centre expansions across the European landscape have been limited over the last three months.
- Following the first half of the year which saw a number of reports of large data centre development projects in the pipeline, European developers and investors have been quiet over the summer quarter, with only a couple of notable exceptions.
- There is strong evidence of the continued expansion aspirations of carriers and IT services companies across the broader European data centre landscape.
- Despite ongoing concerns about consumer confidence, retail end users – especially online retail and market comparison sites – were particularly active over the last three months in the colocation market in the UK.
- Whilst the implication of location on necessities such as security, connectivity and employment remain important, power – how to get it, pay for it and use it efficiently – appears to be the single pre-occupation across the data centre industry.
- IT managers have been accused of continuing to ignore green issues. Survey evidence suggests that nearly 9 out of 10 businesses have no idea how much energy the IT department uses.
- The use of software to help enterprises contain their data centre costs shows signs of growth, with organisations seeing virtualisation as being key to their data centre strategy.
- Surveys suggest that despite ongoing global economic uncertainty, IT spending worldwide should hold up. Focus may start to shift from company-owned hardware spending over to pay-per-use services, a utility model driven by the development of cloud computing.



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COLOCATION GROWTH REMAINS LIMITED

The three months since our July report have seen only a limited number of reports of new space either being fitted out or planned by carrier neutral colocation operators across Europe, and as was the case last quarter, most of these were in the UK market, with the majority away from Central London. Telehouse announced that it will develop an extra 13,000 sq ft of technical data centre space that will aim to satisfy nearterm customer demand before their planned £80 million investment in a new Docklands facility comes to fruition in 2010, whilst to the west of London Rapid Switch reported that it was building a new Maidenhead facility with planned capability for housing up to 600 racks from the second quarter of 2009. Most recently, Network I announced that it is in the final stages of opening its second colocation centre, a new 10,000 sq ft facility in Slough, and lomart finished its 8 month upgrade and commissioning programme to deliver nearly 4,500 sq ft of technical data centre floor space in Nottingham.

In Manchester, UK Grid reported the successful 7,000 sq ft expansion of its Manchester Science Park, noting the possibility of a further 12,000 sq ft at a location just outside the park, as well as plans for a new 130,000 sq ft gross project in the Northern Quarter of the city. At this larger scheme, they are considering an extra initial investment of £4.5 million for three Combined Heat and Power Plants to help avoid Manchester's power shortage and provide a true A&B power feed for a Tier III data centre classification. The reported financial partnership with managed hosting specialist UKFast, worth a reputed £9.6 million, is aimed at speeding up these plans. Elsewhere in Manchester, Internet Facilitators announced the expansion of its Reynolds House data centre by a further 5,000 sq ft, whilst Teledata has moved in to Delta House, Shell's former regional office on the outskirts of Manchester, which has been refurbished to offer 70,000 sq ft of gross office space, of which 30,000 sq ft is earmarked for data centre suites.

Elsewhere in Europe, **TelecityGroup** has announced that it will develop a new data centre in Milan, the Group's 22nd data centre in Europe and second in the city, to deliver approximately 20,000 sq ft and over 2.5 megawatts of customer capacity to the market in the first half of 2009. In Budapest, **Magyer Telekom** announced the expansion of their carrier neutral Dataplex facility from 18,000 sq ft to 47,000 sq ft, at a cost of €18 million. Meanwhile, the last three months have seen the official openings of a number of previously announced data centre developments, namely **Interxion's** Frankfurt and Vienna facilities – providing 16,000 sq ft and 5,000 sq ft of net technical space respectively – and **TelecityGroup's** 50,000 sq ft London Powergate schemes.

DEVELOPERS AND INVESTORS QUIET

Following last quarter's report that saw the announcement of three mega-schemes totalling nearly 1.9 million sq ft gross of newly planned data centre space in the UK, it is unsurprising that no new major schemes have been reported over the last three months. Developer **Digital Realty Trust** provided a buoyant view of the European data centre market, announcing that the company still has a robust growth plan, with a number of new sites around Greater Dublin under immediate consideration. The highlight of the data centre investment market over the quarter was their announced acquisition of the freehold interest in the 38,600 sq ft gross Reynolds House, Manchester facility, an income producing scheme, fully let to three tenants on a long-term basis.

Meanwhile, data centre developer and operator Infinity announced that it has commenced the development on its second data centre. The company reported that nearly 40% of the planned 250,000 sq ft gross data centre space in East London has already been reserved.

CARRIERS AND SYSTEM INTEGRATORS ACTIVE

The summer quarter saw evidence of the continued expansion plans of carriers and IT services companies across the broader European data centre landscape. Finnish IT services company **TietoEnator** reported that it intends to open a data centre in St Petersburg, Russia, as part of its aims to increase annual sales to European countries to over €100 million. ISP AOL has doubled the size of its data centre footprint within **TeleCityGroup's** Frankfurt facility – where **TeleCityGroup** monitor their entire infrastructure from physical network and server hardware through to web and application services. Financial connectivity solutions company **Atrium Network** has taken data centre space at **Equinix** facilities in Frankfurt and



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London, whilst Danish IT integrator, **NNIT**, revealed an extended partnership with **Interxion's** Copenhagen data centre. **Global Crossing** also announced its plans for a new centre in Amsterdam, part of the firm's plans to continue the modular development of its hosting solutions business in Europe. The Amsterdam facility will be available in early 2009.

In the UK, SunGard Availability Services has confirmed that it will be taking space in Sentrum's 200,000 sq ft data centre facility in Woking. Initially leasing 25,000 sq ft, the agreement also provides SunGard Availability Services with the option to double its capacity in the future. In addition, the group has announced that it has upgraded its Elland managed services centre in the north of England to now provide up to 37,000 sq ft of resilient data centre space within the 89,000 sq ft complex. Meanwhile, IT services company Fujitsu Services announced the opening of its £44 million energy-efficient data centre in Stevenage, to the north of London. The centre has claimed some strong environmental and sustainability credentials; not only is it reported to be the first in Europe to be independently certified to the Uptime Institute's international Tier III standard, but it is planned to nearly halve the energy used by previous data centres.

Other transactions in the UK include Northgate Technologies' purchase of Reuter's 8,000 sq ft data centre infrastructure in Central London, whilst ControlCircle, the network security services company, has reported an increased footprint at Interxion's London City data centre. London Internet Exchange has announced that it is to house a new point of presence at Interxion's data centre, as well as Equinix's London 4 centre in Slough, and IT services firm, Anite, has reported that it is building a second data centre presence in Slough which will give the company approximately 2,000 sq ft of extra technical space ready later this year. In Reading, Netstore announced that it has finished the development of a further 1,800 sq ft of technical data hall, doubling the size of its original facility, whilst Cantono has now confirmed that it has been given planning permission for its previously announced 80,000 sq ft centre in Eastleigh, north of Southampton, in addition to securing an additional 50% of available electrical power, taking its site capacity to 15 MW.

RETAIL END-USERS DOMINANT

Online retail and market comparison sites featured in a number of reported colocation transactions over the summer quarter, although whether this is an indication of expanding growth plans of online companies in the face of a general slowdown in traditional high street retail activity is hard to predict. Chester-based Moneysupermarket took a five-year colocation contract at Teledata's Manchester facility, global online shopping comparison site, Twenga, took an initial 100 dedicated servers from LeaseWeb's technical space at EvoSwitch's Amsterdam data centre, and newcomer to the online marketplace, Aroxo, entered into a multi-year agreement to use lomart's intelligent hosting service supported by its four data centres in London, Nottingham, Leicester and Glasgow. In addition, Rightmove is reported to have taken sixteen racks with ControlCircle through their London colocation space sourced from Interxion and VSNL, supported by further colocation services provided at Telstra's London Docklands data centre.

There was also reported activity amongst the traditional retailers; **Kingfisher IT Services** – servicing **B&Q**, **Castorama**, **Brico Depot** and **Screwfix** – doubled its data centre space from 3,000 sq ft to 6,000 sq ft in the UK and **Vilniaus Duona**, one of the oldest and the largest bakeries in Lithuania, reported that it has signed a 3 year contract with **Baltic Data Centre** for server colocation and maintenance services from its Vilnius, Lithuania, data centre.

Other corporate end-users that have announced increased data centre space include Bechtel, an engineering and construction company, which contracted with Interxion's London City facility; online backup provider KeepITsafe who has chosen Digiweb's data centre in Blanchardstown, Ireland, in a deal valued at €200,000 over three years, and the International Institute of Information Technology (SUPINFO), France's leading international ICT school, which has extended its relationship with TeleCityGroup through additional hosting space at the Aubervilliers, Paris data centre facility. Meanwhile, Dresdner Kleinwort confirmed the relocation of its data centre from London Docklands to a new facility in Watford, driven by the shortage of power in Central London, overall rising energy bills and the desire to create a more efficient data centre environment.



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POWER PROBLEMS PERSIST

It is unsurprising that the last quarter has again seen power dominate the strategies of data centre owners, operators and occupiers alike. Whilst the implication of location on necessities such as security, connectivity and employment remain important, power – how to get it, pay for it and use it efficiently – appears to be the single pre-occupation across the data centre industry.

Whilst the upward pressure on oil inflation has now – at least temporarily – subsided, a study by **IDC** highlights worries that the issue of the cost of power will not go away in the near term. **IDC** warned that the real cost to power and cool the world's external storage alone topped US\$1 billion in 2007, a figure which is expected to increase this year. In Ireland, a survey by **iReach** suggests that Irish data centre energy costs are likely to exceed property costs by 2010 as high-density racks become 'standard' by the end the decade. It predicts that in some data centres, especially single-story buildings, this is already true. While this study is specific to Ireland, the trend is likely to be true for the rest of Europe and, indeed, the world.

With this in mind, it is surprising that IT managers have been accused of continuing to ignore green issues. A recent survey from consultancy Morse Group in the UK, France and Germany revealed that 89% of businesses have no idea how much energy the IT department uses. Despite this, there is evidence of quite basic opportunities for cost savings; whether enterprises will be driven to implementing these savings for the sake of their profits or the environment remains to be seen. The survey, undertaken by Vanson Bourne, found that over 80% of respondents allocated extra storage capacity even if they realise that it generates other difficulties such as under-utilised storage capacity and increased need for floor space and energy. In addition, it found that 76% of companies have set no targets for reducing the IT department's power usage, and 62% said that green IT was not a top priority.

The use of software to help enterprise contain their data centre costs shows signs of growth, with organisations seeing virtualisation as being key to their data centre strategy. According to IDC's 2008 European Server Virtualisation Survey, the pace of adoption of virtualised servers is rapid among organisations that are already using virtualisation – with 35% of servers purchased over 2007 being virtualised and 52% of those bought in 2008 expected to be so. In addition, 54% of companies not already using virtualisation expect to do so in the next 18 months. With evidence that this form of server management can produce large cost savings – such as Web developer **Senaca's** reduction of 50 servers held at **LeaseWeb's** Amsterdam colocation centre to just 10 virtualised ones – it is likely to remain a priority in IT departments.

To help companies understand the energy use within data centres, The Carbon Trust has announced a partnership with the British Computer Society (BCS) to develop a simulation software tool. Based on a model created by the BCS Data Centre specialist aroup, the software tool will deliver outputs allowing operators to manage total costs of ownership, energy efficiency and ultimately carbon emissions on a per service or per application basis, an industry first in terms of carbon accountability. Romonet will produce the software, which is expected to be available in first guarter of 2009 and will be released through an open source license. Tools such as this should help with the understanding of power consumption in the data centre environment, and enable enterprises to then make decisions on how to effectively and efficiently run their data centres. Indeed, in the UK the Department of Business Enterprise and Regulatory Reform (Berr) has most recently confirmed that all new commercial property must be zero carbon by 2019, which will inevitably force businesses to look for more energy efficient strategies when developing data centre real estate.

Some data centre operators have recently announced their efforts to do just this. **The Cork Internet Exchange** has announced that it now uses excess heat from server rooms to feed back into heat exchanges to be used for its hot water supply and radiator system, whilst the **Comtec Enterprises**' data centre in Riegate, Surrey uses a hydrogen fuel-cell to generate back-up power, reducing the firm's carbon footprint as heat and water are the only waste products. On a more



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committed scale **TelecityGroup** has teamed with Eindhoven based **Van Schaik Innovation Handling** to visualise air streams and heat release at all of **TelecityGroup's** Amsterdam data centres enabling them to arrange the best possible cooling operations and advise clients on the most energy-efficient setup of their equipment. In Paris, the same operator has announced that it will join EDF's "Equilibre +" programme which certifies the equivalent of 21% of the electricity consumed by TelecityGroup is generated from renewable sources of energy and guarantees a neutral impact in terms of carbon dioxide emissions.

IT SPENDING TO HOLD UP

The most recent survey work from Gartner and IDC suggests that colocation and managed service providers could continue to benefit from strong interest from global enterprises. Gartner suggest that despite ongoing global economic uncertainty, IT spending worldwide should hold up, predicting that global IT spending will exceed US\$3.4 trillion this year, up 4.5% in constant currency terms. Meanwhile, IDC survey evidence suggests that whilst European enterprises may reduce overall IT spending over the near term, they remain committed to spending on security issues and are focusing on cost efficiencies including server and storage consolidation, storage area networks and network attached storage. The latest TPI survey has announced growth in the use of managed services companies and third party service providers. In the first half of 2008, over £30 billion worth of contracts, representing 285 managed IT outsourcing deals were signed in the Europe Middle East and Africa region.

Notably, **Gartner's** forecasts attribute a large part of IT spending growth to a shift from company-owned hardware to pay-per-use services. The growth of this utility model is driven by the development of cloud computing; by which users gain access to applications through Internet-connected devices, enabling computing resources to be dynamically provisioned and shared to achieve significant economies of scale. **Merrill Lynch** analysts believe that by 2011 the volume of cloud computing market opportunity will amount to US\$160 billion, and has recently prompted interest from tech giants including **Microsoft**, **Sun Microsystems**, **Amazon** and **Google**. The net effect that cloud computing will have on the global data centre footprint is difficult to predict at this stage. Whilst older facilities could still struggle to cope with the power demands of enhanced technologies, the ability to spread computing power over a number of facilities could allow IT managers to tailor computing resources to data centre capabilities. The larger global integrators appear to have committed to the model, with IBM announcing it will spend US\$360 million to build a data centre at its facility in Research Triangle Park, Raleigh, USA, in order to provide cloud computing services to its clients. It has also stated that it will also launch a separate cloud computing centre in Tokyo, to add to centres in Beijing, Dublin and Johannesburg. In addition, Hewlett-Packard, Intel and Yahoo said they would collaborate to build data centres to promote cloud computing technologies and allow researchers from allied academic institutions and industry to test software written for cloud infrastructure. Whilst interest in cloud computing may at the moment predominantly come from some of the largest IT services companies, there is little doubt that the predicted levels of investment that this computing model will attract over the near term will have a significant broader influence on enterprise data centre use.

Authored by Jonathan Heap, Director, iXNewsSearch



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European Data Centres

SECOND QUARTER 2008

Highlights

- Large shell transaction drives corporate take-up in London.
- Total market take-up increased quarter on quarter.
- 16% increase in fully-fitted stock across Europe, compared with the same quarter last year.

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Total Stock

EXECUTIVE OVERVIEW

Take-up levels in Quarter 2 showed a positive response to the stagnation seen in Quarter 1, primarily in the London market. The data centre market has so far been less affected by the financial slowdown than other real estate markets.

Total stock levels in the Carrier Neutral Hotel (CNH) market decreased on the previous quarter from 573,670 sq m to 570,740 sq m due to shell & core space being fitted out to order. As a result total CNH availability dropped from 150,780 sq m to 132,870 sq m.

Total CNH market vacancy stood at 23.28% with a fully-fitted vacancy rate of 10.98%.

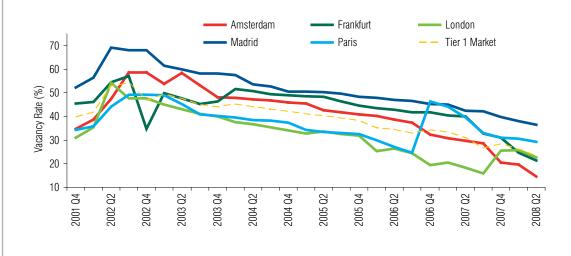
Total market take-up for Quarter 2 was 45,520 sq m, an increase on the previous quarter of 144%. This was driven by a large shell transaction in the outer London market. The impact of this meant that takeup during Quarter 2 represented the third highest recorded take-up since we began monitoring the five European tier 1 cities.

GRAPH 1: CNH VACANCY RATE (%) PER TIER 1 MARKET

In terms of market apportionment, take-up in Quarter 2 was largely in the shell market, 27,410 sq m (60%), CNH take-up was 16,990 sq m (37%) and 1,120 sq m (3%) was in threat stock. This is representative of the impact of wholesale shell take-up on the wider marketplace.

In terms of take-up by market sector, 33,620 sq m (74%) was from the corporate sector, 4,640 sq m (10%) was in retail transactions, 3,820 sq m (8%) was in the technology sector and 3,440 sq m (8%) was from system integrators.

During the second half of 2008 we expect to see continued demand in the CNH market and potentially further shell deals in the London market.



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QUARTER TRENDS AT A GLANCE

GRAPH 2: TOTAL CNH STOCK PER TIER 1 MARKET

MARKET OVERVIEW

CNH Supply

In Quarter 2, total CNH stock dropped by 2,930 sq m from 573,670 sq m to 570,740 sq m. This decrease was due to the building out of shell & core space to meet tenant demand leading to a small reduction in space. As a consequence fully-fitted stock increased from 392,700 sq m to 402,460 sq m.

Of the total stock 402,460 sq m (71%) was fully-fitted space, 119,000 sq m (21%) was shell & core space and 49,280 sq m (9%) was central services space. Compared with 12 months ago there has been a 16% increase in fully-fitted stock across the five tier 1 markets.

Total space was apportioned across the five tier 1 cities as follows: 237,130 sq m (42%) in London; 165,980 sq m (29%) in Frankfurt; 81,460 sq m (14%) in Paris; 52,560 sq m (9%) in Amsterdam; and 33,610 sq m (6%) in Madrid.

Year on year, total stock has increased by 32,630 sq m, which is largely due to an increase of stock in the London market in Quarter 2 2007. We still expect to see supply continuing to grow in the medium term but on a more restricted basis than over the past 24 months.

Market Take-up & Demand

Total take-up for the European tier 1 market in Quarter 2 was 45,520 sq m, which represents a substantial increase of 144% on the previous quarter.

The majority of take-up was in a single transaction in the shell market, 27,410 sq m, and as highlighted last quarter, this underlines the impact that the wholesale shell market has on take-up within the five tier 1 cities. Of the remaining 40% of take-up, 16,990 sq m (37%) was from the CNH market and 1,120 sq m (3%) in threat stock.

CNH take-up was apportioned as follows: 5,990 sq m (35%) in London; 5,550 sq m (33%) in Frankfurt; 2,650 sq m (16%) in Amsterdam; 2,010 sq m (12%) in Paris; and 790 sq m (5%) in Madrid.



GRAPH 3: SOURCE OF QUARTER 1 TOTAL TAKE-UP

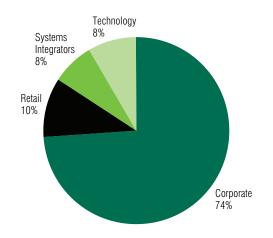
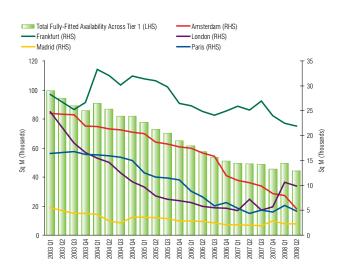


TABLE 1: TOTAL TAKE-UP ANALYSIS

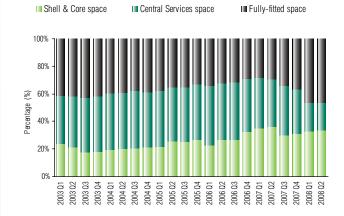
Take-up (Sq M)	Q2 2008	Q1 2008	Total 2008
Amsterdam	2,730	460	3,190
Frankfurt	5,550	11,180	16,730
London	34,440	1,190	35,630
Madrid	790	670	1,460
Paris	2,010	5,120	7,130
Total	45,520	18,620	64,140





GRAPH 4: FULLY-FITTED CNH STOCK AVAILABLE PER TIER 1 MARKET

GRAPH 5: DISTRIBUTION OF CNH AVAILABILITY BY MARKET SEGMENT



Overall take-up was apportioned by sector as follows: 33,620 sq m (74%) was to corporates; 4,640 sq m (10%) was made up of retail transactions; 3,820 sq m (8%) was in technology transactions; and 3,440 sq m (8%) was to system integrators.

CNH Availability

Overall availability dropped by 17,910 sq m to 132,870 sq m. Of the total availability, 61,420 sq m (46%) was shell & core space, 44,180 sq m (33%) was fully-fitted space and 27,270 sq m (21%) was central services space.

Availability was apportioned across the five tier 1 cities as follows: 53,750 sq m (40%) was in London; 35,380 sq m (27%) was in Frankfurt; 23,830 sq m (18%) was in Paris; 12,260 sq m (9%) was in Madrid and 7,650 sq m (6%) in Amsterdam.

The CNH market vacancy now stands at 23.28%, a decrease from 26.28% in the previous quarter. Over the quarter the CNH vacancy rate fell in all five of the tier 1 markets and fullyfitted vacancy rate stood at 10.98%.

FORECAST

Although we witnessed a slow start to 2008 in the London market, we continued to see demand in the other European tier 1 cities. In London this quarter, we have seen take-up levels return, both in the CNH and shell markets. The continued growth in the CNH market is illustrative of underlying demand in the data centre market.

The difficulties in the capital markets have helped to constrain supply and as such the market has not been flooded with stock, which has helped maintain a healthy market equilibrium. The difficultly in obtaining funding for projects means that pre-lets are a prerequisite for any large scale buildouts, given the capital-intensive nature of any such project and as such we expect the equilibrium to continue in the medium term.

Whilst the full impact of the credit crunch is unclear it is evident that the consequential restraint it will place on IT budgets will lead to occupiers procuring on a less capital-intensive basis. A requirement for opex solutions to support sagging balance sheets means that the market opportunities open to third party CNH operators and systems integrators will undoubtedly grow.



MARKET FOCUS

London

After a slow start to the year, take-up picked up considerably in the London market in Quarter 2. Take-up this quarter was 34,440 sq m which represents a significant increase on the previous quarter's 1,190 sq m and is the third highest recorded take-up since 2004. 80% of this take-up was driven by a large wholesale shell transaction (27,410 sq m). Of the remaining 20%, 5,990 sq m (17%) was in the CNH market and 1,040 sq m (3%) was in threat stock.

The majority of the 34,440 sq m of take-up was apportioned in the corporate sector (30,620 sq m, 89%) with the remaining being made up of 2,250 sq m (6%) from systems integrators, 990 sq m (3%) of retail transactions, and 580 sq m (2%) from the technology sector.

Following Quarter 1, we have seen growth in both the shell and CNH markets with continued demand for space across all tenant categories.

We expect to see continued growth in CNH market take-up, and potentially more wholesale shell deals in the second half of 2008.

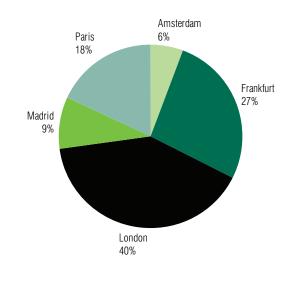
Frankfurt

Take-up in the Frankfurt market was 5,550 sq m, a drop of 5,630 sq m on the previous quarter. All of this take-up was apportioned in the CNH market. Although this is a sizeable decrease on the previous quarter, the Frankfurt market had the second highest take-up of the five tier 1 markets and is still showing a healthy take-up rate which looks to be sustainable in the long term. Over the last 24 months, the average quarterly take-up has been 7,835 sq m.

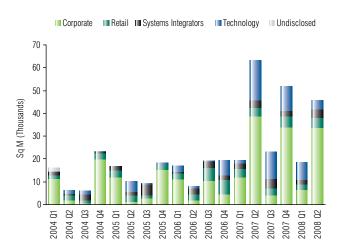
In terms of the 5,550 sq m of reported take-up, 2,250 sq m (41%) was in the technology sector, 1,680 sq m (30%) was to corporates, 1,190 sq m (21%) was to system integrators and 430 sq m (8%) was in retail transactions.

Total availability was down by 14% on the previous quarter from 41,010 sq m to 35,380 sq m. Of this availability, 21,940 sq m (62%) was fully-fitted stock, 6,740 sq m (19%) was central services stock and 6,700 sq m (19%) was shell & core stock. A significant amount of fully-fitted availability is in one building – Data 110. This is the only large contiguous fully-fitted space available in Frankfurt today.

GRAPH 6: AVAILABLE CNH SPACE ACROSS ALL TIER 1 MARKETS



GRAPH 7: QUARTERLY TOTAL TAKE-UP ACROSS ALL TIER 1 MARKETS





The vacancy rate continued to drop with a 21.32% vacancy rate compared with 39.92% in the same quarter of last year. Once the Data 110 facility has been taken, this would take the total market vacancy rate to well below 20%. This the level where, as we have witnessed in other tier 1 markets, the building of new facilities takes place.

Amsterdam

In Quarter 2 we saw an increase in take-up on the previous quarter of 2,270 sq m from 450 sq m to 2,730 sq m. The majority of this take-up was apportioned to the CNH market (2,650 sq m, 97%) with 80 sq m (3%) of take-up in the threat market.

Of the take-up in the CNH market, 1,320 sq m (50%) was to corporates, 910 sq m (34%) was to the technology sector and 420 sq m (16%) was in retail transactions.

Total availability dropped from 10,280 sq m in Quarter 1 to 7,650 sq m in Quarter 2. The available space was apportioned as follows: 5,300 sq m (69%) of fully-fitted space and 2,350 sq m (31%) of central services space. The vacancy rate in Quarter 2 stood at 14.55%, but this will increase next quarter as new CNH stock is brought to market.

Paris

Total take-up this quarter in the Paris market was 2,010 sq m which was fully apportioned to the CNH market and was entirely made up of retail transactions.

Overall availability stood at 23,830 sq m, a drop on last quarter of 1,110 sq m. We have seen a steady decline of availability since the last big surge of stock buildout in Quarter 4 2006. Availability in Quarter 2 was made up of 18,770 sq m (79%) shell & core space, 4,840 sq m (20%) was fully-fitted space and 220 sq m (1%) was central services space.

We are aware of a number of wholesale transactions which are likely to complete in Paris by the end of 2008 and as such we expect to see new facilities brought to market next year.

Madrid

Madrid continued its increased levels of take-up reporting 790 sq m in Quarter 2. This represents an increase of 18% on Quarter 1. All of the reported take-up was in the CNH market, and was entirely made up of retail transactions.

Availability stood at 12,260 sq m which was apportioned as follows: 9,240 sq m (75%) was central services stock; 2,230 sq m (18%) was fully-fitted stock; and 790 sq m (6%) was shell & core stock.

The vacancy rate stood at 36.48%, reduced from 38.10% the previous quarter. The fully-fitted vacancy rate was 14.09%.



DEFINITIONS

Carrier Neutral Hotel Stock: Data centres where the operator allows any carrier to connect into the facility and to connect to third parties within the facility, not discriminating between different carriers and charging only nominal fees for interconnection.

Threat Stock: In contrast to CNH stock, threat stock data centres are owned or operated by Carriers or hosting organisations which seek to provide bandwidth as part of any service offering and may not be strictly carrier-neutral.

Shell Stock: Typically land for development or modern empty warehouse which is acquired for conversion to a data centre for use by an end-user who will use the space for their own purposes, i.e. a corporate.

Shell & Core: Shell & core space is the base real estate of a data centre, a wind and watertight structure with exposed floor and ceiling slabs and exposed finishes to the walls. The landlord would obtain permissions for data-centre use and make provisions for tenants to install their own chillers and back-up power generating equipment. In addition, an incoming diverse raw HV (high voltage) power supply would usually be provided.

Central Services: Central services space comprises shell & core plus the main services of diverse chilledwater pipes and a diverse low-voltage generator-backed power supply which are provided by the landlord into the space so that the tenant can install their own dedicated air-conditioning units, powerdistribution units, fire suppression and raised-floor systems.

Fully-fitted: Fully-fitted space is ready for tenant IT equipment to be installed almost immediately or subject only to minor works being carried out to account for bespoke equipment and layouts.

Retail Transaction: Individual letting smaller than 185 sq m (2,000 sq ft).

Wholesale Transaction: Individual letting greater than 185 sq m (2,000 sq ft).

DATA SOURCE

Accurately capturing the dynamics of all the categories of the Technical Real Estate market is very difficult, especially when attempting to analyse vacancy within standalone Carrier, Web-Hosting and IT outsource data centre facilities. The Carrier Neutral Hotel market caters for the full range of user/operator requirements and so is best indicator of the underlying conditions in the Technical Real Estate market.

CB Richard Ellis has monitored worldwide Carrier Neutral Hotel supply statistics since 1999. This bulletin relates only to the European Carrier Neutral Hotel Tier 1 markets. In addition, we produce a US bulletin and more detailed Tier 1 market statistics are available on request.

TECHNOLOGY PRACTICE GROUP

CB Richard Ellis formed a Technology Practice Group (TPG) in 1994 to address the specialised technical real estate needs of high-tech firms such as telecommunications companies, data centre operators and corporates across the world.

Core technical real estate services provided by the TPG include:

- Investment
- Disposal one-off assignments, multi-site marketing campaians
- Acquisition one-off assignments, worldwide network rollouts
- Consultancy - consolidation strategies, Mergers & Acquisitions
- Asset Valuation - Bank, Corporate
- Project Management, Development Monitoring, Due Diligence, Building and M&E surveys
- **Facilities Management**
- Research - market reports, statistics, take-up forecasting

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