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Current Trends in European Data Centres

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Good morning and a great pleasure to be able to address the Data Centres Europe conference in it's third year and we're certainly not surprised to find it getting bigger with every passing year.

Over the next 15 minutes I want to update you with some of the changes that have taken place in the market over the past 12 months, to give you a feel for what is driving them and to give you some sense of where we see things going over the next 12 months.

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Agenda

- Market Background
- Demand/Supply Drivers
- Pricing Issues

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I thought the simplest way to do this was to use the same approach in analysing the market that we've used in the past, so in other words to break down the picture into both the demand and supply side items and then to see what effect these have had on pricing. As you will see, its not just that prices have changed but also the industry pricing structure itself, with several new themes emerging that we can only ask at this early stage if they are new long term trends or just temporary aberrations.

Company Introduction

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- **Company Model**
  - Act as agents, brokers
  - Not an operator
  - Introduce buyers to vendors
  - Vendors pay fees/commissions on successful transactions
  - No preferential relationships, work with virtually all providers
  - Facility owner/operators to managed service providers
- **Company Background**
  - London based
  - Most active in the European market
  - Global coverage, US, Asia, several hundred supplier relationships
  - Experience since 1999
  - Range from a rack up to 1000 sq m
  - Unique, independent perspective

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Just very quickly for anyone here not familiar with The Colocation Exchange, a brief explanation to why we are well placed to present on this subject, but hopefully there is nothing on this slide that comes as a surprise to anyone present here this morning.

The key points I would like to point are

The part of the market in size that we focus on

and the fact that we work with virtually every operator in the market, from large pan European providers to small local, managed service providers

Which means we have good perspective on this part of the market

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So, on to the market as a whole

Market Background

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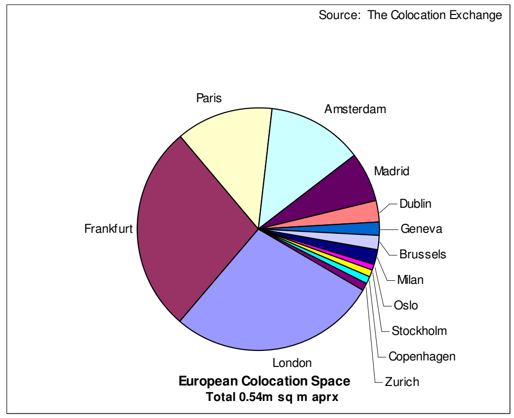
- A time of great change
  - Shift in emphasis
  - Significant consolidation
- Regional Variations
  - London lead the way, Paris, Amsterdam, Dublin caught up on smaller installed bases
  - Frankfurt remains unique



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As far as this audience goes you'd have to have been in very remote place not to have realised the significant changes that have taken place in this industry in Europe over the past 12 to 18 months.

I suppose if you'd been away for the past 6 or 7 years you'd think things haven't changed, but they have: most importantly is the type of buyer, who tends to be of a corporate customer, ie end user, compared with the buyers of old who might be a wholesale operator and the fact that when people buy space they tend to use it, right away.

The pie chart gives a breakdown of Carrier neutral colocation space across the main markets in Europe. We estimate this at just over half a million square metres of space today, or just under 6m square feet.

In terms of overall size London and Frankfurt appear comparable, but the difference is that London is almost sold out at present whereas Frankfurt is probably one of the best supplied markets and we'll pick up on the impact of this situation when looking at pricing

We'll now have a look at the current market drivers, starting with the demand side of things

Demand Drivers

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- Strong financial sector demand
- Strong organic growth
- New interest from corporate sector on a broad front
  - IT replacement cycle post Y2k
  - Taking advantage of broadband, MetroEthernet
  - Increased awareness of DR even if not directly regulated
  - Realising the value proposition of colo facilities
  - Either directly or via integrators/out sourcing
- New drivers eg IPTV, content

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This slide is largely unchanged from that which I presented last year, but I would make the following points, that we have

“**Continued**” strong demand from fin sector

“**Continued**” strong organic growth. John Souter, CEO of LINX is here this afternoon and he will tell you more about the continued strong growth in both volumes and membership at LINX, but which I feel is a very good proxy to demonstrate the underlying impact the digital or broadband revolution is having. Don’t forget, as more and more content goes online it needs to be stored online and this usually means in a data centre somewhere

In corporate sectors its now very BROAD, the DR net is spreading but also is a growing awareness that it’s not just about preparing for disasters but also it’s just good business practice to have your data, whether for internal or external consumption available on a reliable basis, with such reliability usually achieved by use of a data centre. Its’ more a case of just good business practice. And colo is now being considered as part of either general IT replacement of even events such as an office move, **eg London, Hollywood studio**

And finally a new line on this slide is the New content driven markets

So, all in all, the demand picture remains robust and BROAD

Supply – remaining tight

- Old Stock has been absorbed
- Existing facilities have filled
- Or run out of power/cooling
- Consolidation not helped
- Very few new sites, yet

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In terms of the supply side of the equation its pretty much a continuation of the same themes we presented last year. The vast stock of today's data centre space was built over 5 years or 6 years ago, and if it's still available on a carrier neutral basis it's filled up, or if was offered into the market it was snapped up at cents on the dollar during the down turn.

However, as the picture on the right shows, new space is at last beginning to trickle onto the market. This is a new facility out at Slough and I must admit it felt a bit like old times to be walking around a building site again. I think the last such site we visited was probably Global Switch2.

I think the consolidation process has affected supply to a degree, as some operators have clearly found it cheaper to acquire space than build anew, so this hasn't helped the overall supply situation even though the acquiror may have increased stock on their books. I also think the integration process means those companies affected are probably focussed on this than building again, but perhaps if things settle down again the can address this.

Overall, our impression is that supply is not keeping up with demand and

Supply - Absorption of stock

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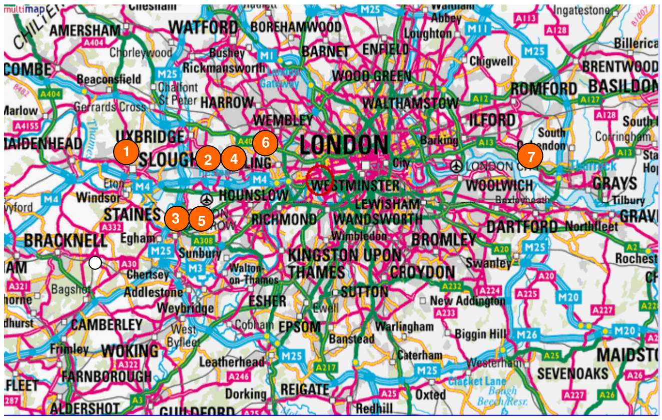

1. Worldport – Centrica
2. Cityreach – UBS
3. Digital Island – Centrica
4. Digiplex – Deutsche Bank
5. Tyco – Morgan Stanley
6. Exodus – C+W
7. KPN - Fujitsu

Supply

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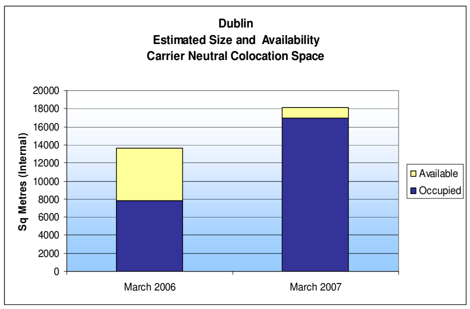

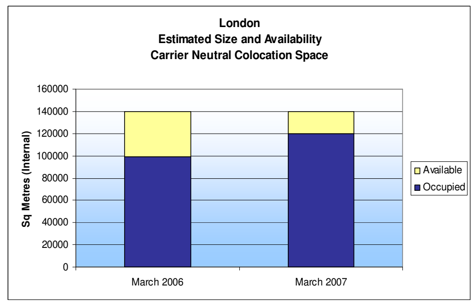

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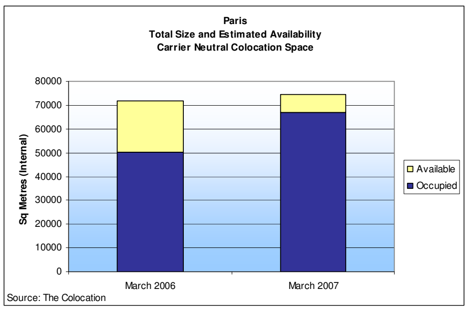
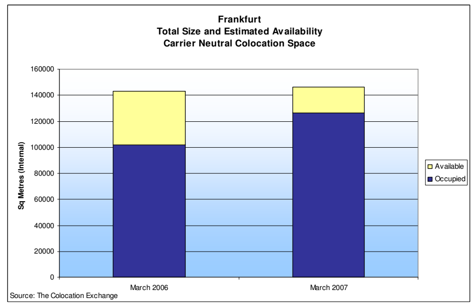
A review of a couple of markets provide a good indication as to what's happening overall, Dublin and London.

With Dublin we have indeed seen quite some growth in the market, although half of this is that a previously carrier owned site is now being made available on a carrier neutral basis, but none the less, there has been growth over and above this. Despite this though, we can see that the occupancy rate has in our estimation risen from 60 to over 90%.

In London, the first major difference is that the overall market size had hardly changed at all over the past year (it is up a tiny amount). In the meantime, again, in our estimate, the occupancy rate has gone from 70 to nearly 90%. Do bear in mind though that the 20,000sq m taken up over the past year is the bigger than the entire Dublin market.

Supply





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In Paris we have seen some growth of around 3000sq m over the past year but in the meantime take up of around 17,000 sq m. In Frankfurt just under 25, 000sq m of space has been taken up and occupancy might appear quite healthy at nearly 90%, but the main point about Frankfurt is that there is masses of raw or unprovisioned space that can easily be brought on.

Supply: feet or kilowatts?

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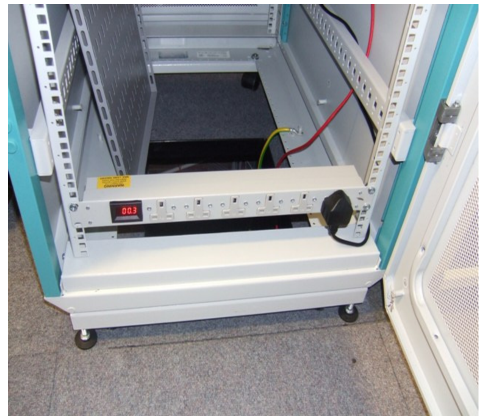
- How we measure capacity is changing
- Square feet/metres somewhat meaningless today
- Its kilowatts that matter!
- Effect on pricing?



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But talking about feet or metres seems a bit odd these days when most requirements we deal with are measured in kilowatts. It's either a 1 or 2kW or more kilowatts cabinet required, or x 100 kW needed.

And this change is also affecting pricing structure across the industry.

Supply: measuring supply

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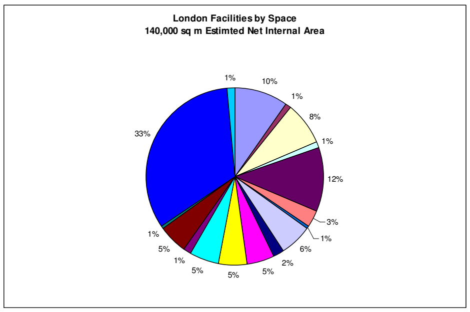

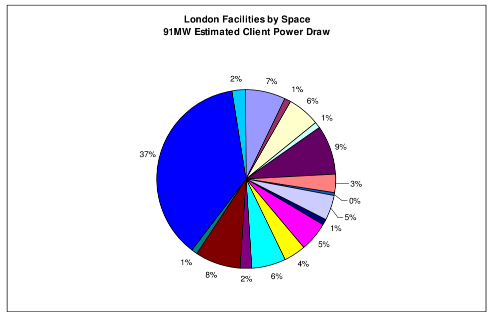

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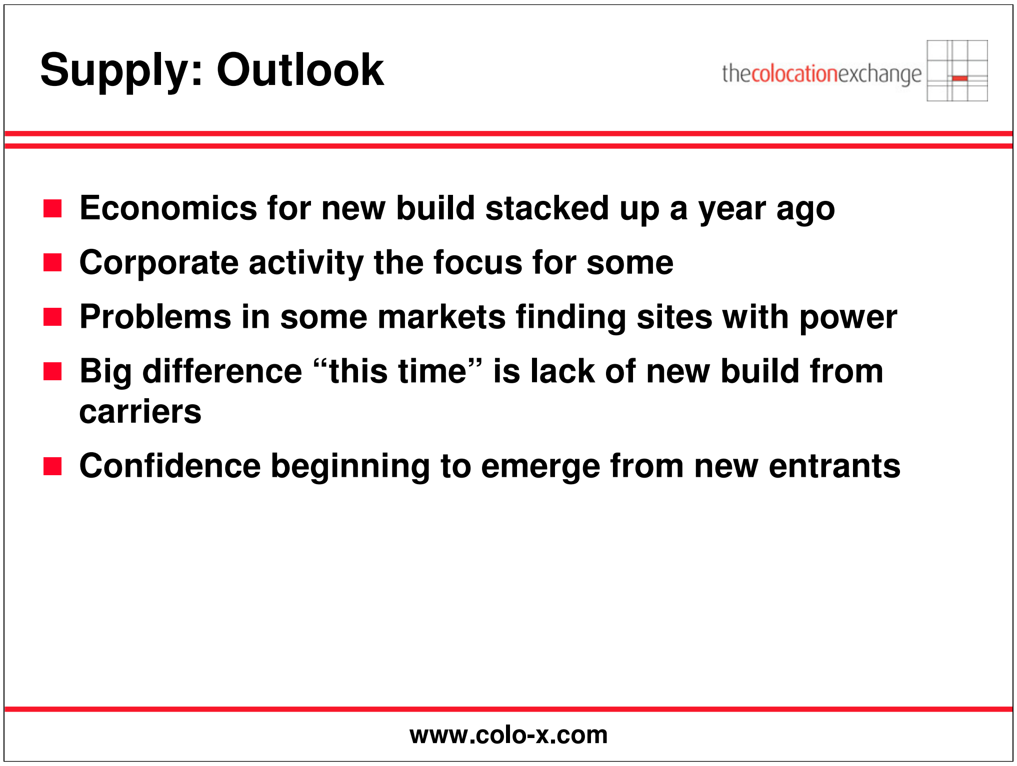
So perhaps the best way to describe a facility is not so much by it's area but by its' capacity for power and cooling. Taking our estimated knowledge of the London facilities for example we thought we'd have a look at this approach, though it was quite ironic when doing this to remember some of our sites are quite old now and power capabilities by today's standards are quite low! However, you can see some changes in the various slices of the pie.

In London the range in facility capacity is probably from under 500W sq m (generously!) to 1250W sq m, and even higher for some new builds we are seeing.



Ahead of our presentation a year ago we spent quite some time with a number of operators who were very kind to give us detailed access to their models with respect to the economics of new build and as we mentioned last year the models were predicting very healthy IRR's at the then prevailing pricing, capex and discount rates. I don't think anything has changed from the cost input side over the past 12 months to really alter the outcomes, so I think it's safe to say the returns have got to be looking even better today. And I think this point is now being realised by a growing level of interest from possible new suppliers. However, given the sheer scale of investment required today for even a modest new facility the stakes are of course high, let alone finding the right site to build one on anyway. However, don't forget one major source of supply five years ago simply isn't here today, namely the wholesale carrier industry, many of whom find themselves also rapidly running out of capacity in their facilities. Finally in the meantime of course some possible providers may be more focussed on the next corporate deal than building their next facility. All in all therefore, one has to draw the conclusion that flood gates are not about to open and the supply pipeline, for the foreseeable future, looks limited. Whilst those in the driving seat may be pleased to hear this we find it quite worrying, not just because it will make it hard for us to successfully close deals but because of the impact this may have on the entire IT industry.

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Agenda

- Company Introduction
- Market Background
- **Pricing Issues**

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So, onto pricing issues and how is this supply demand balance affecting things?

Pricing Issues – view Mar 06

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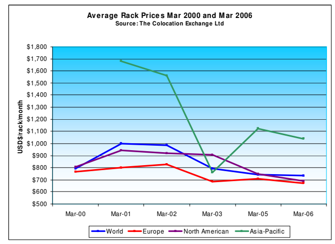
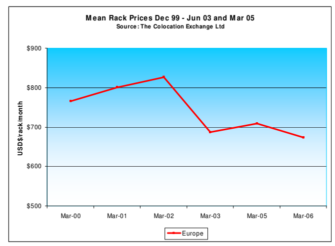
- **Up until March 06 Prices ON AVERAGE hadn't changed that much**
- **But big variation in what was included**
- **Changes**
  - **Prices themselves**
  - **Pricing models**





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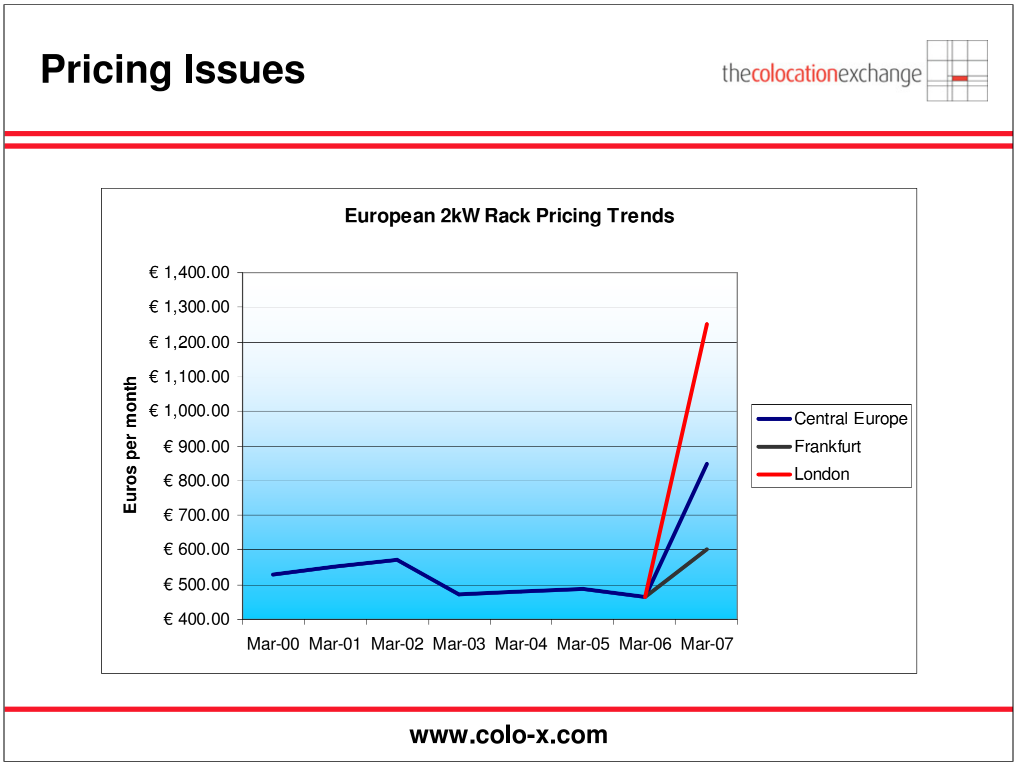
A year ago AVERAGE pricing hadn't really begun to change that much. YET. However word was certainly out that big changes were afoot, clearly driven by a change in pricing strategy by the newly formed TelecityRedbus Group.

And whilst we tracked various pricing going back several years, this was really a crude mechanism as there was little attention paid to the differences in the various packages being offered. However, I think the benchmarks produced tracked the ups and downs of the market reasonably well.

Today however it's not just that prices themselves have changed its' also the structure. More often than not we are given a price for the rack rental and told what the power usage charge is, for example it's 500Euros month plus power usage billed at xCents per kWh. We think this is quite an open and transparent approach as it is effectively ring fencing the vagaries of power costs from the provider. If power costs surge again it will be much easier to link this to the appropriate electricity supplier. Hopefully the power crunch of the past year or so is behind us now and the UK market for example does seem easier since the arrival of new gas supplies and the longer term outlook for power costs is a topic beyond the realms of our time here today.

So, with changes to the model now discussed, what's been happening to pricing:



So the first thing to notice on this slide, apart from it's dramatic kick, is that we now have to be very specific about what we are talking about! Here we are looking at pricing for 2kW or roughly 10Amps racks.

To sum up the changes, we can clearly see that in London prices have, on average more than doubled over the past year. For some users, the increases have definitely been more than this. For example, if you are a high power buyer and had a good deal beforehand, ie below average price, you may well have found the increase to have been as much as 200% and we know of several instances where this has happened.

In mainland Europe prices have also increased significantly, by 70% approximately. In the Frankfurt market though we are suggesting a rise of only 20 odd percent. Certainly in Frankfurt some operators with specific facilities have been able to raise prices, but it's hard to see this in the AVERAGE figures when good quality stock is still available at discount prices.

Market Background: Pricing

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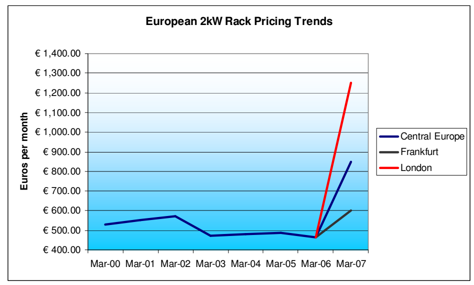
- **Key drivers:**
  - **Consolidation – market power**
  - **Balance of supply and demand**
  - **Power costs**
- **Divergence across regions**
  - **London**
  - **Paris, Amstdm, Dublin**
  - **Madrid, Geneva, Zurich, Coph, Scandinavia, Milan, Vienna**
  - **Frankfurt**



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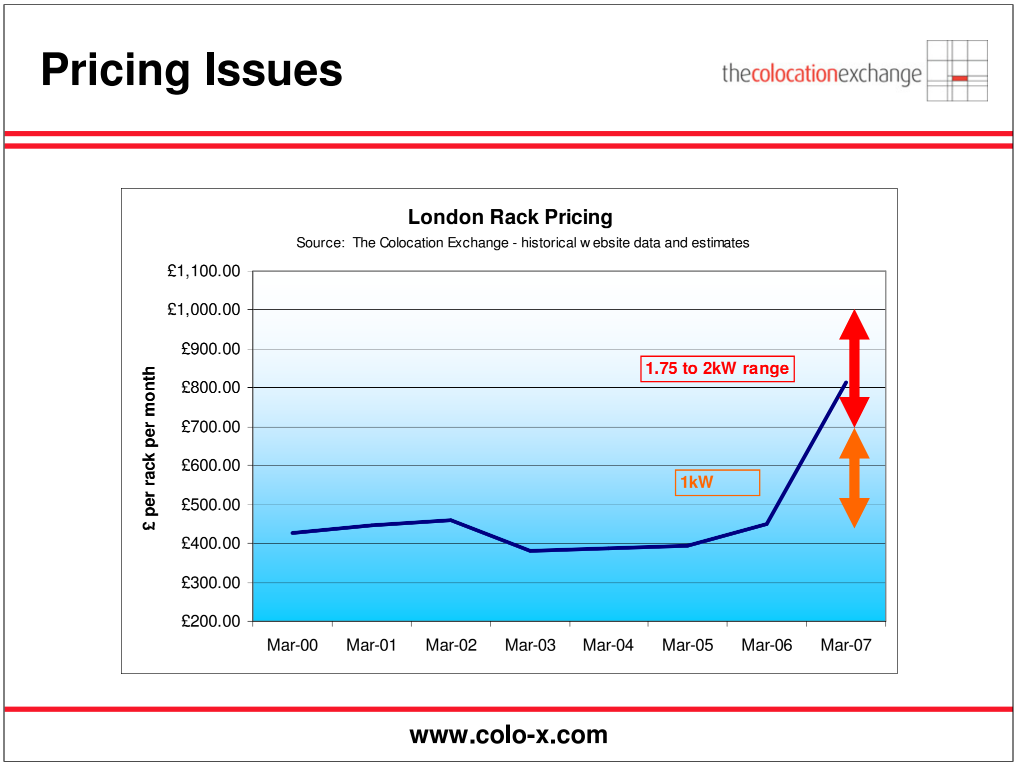
We also felt it worthwhile to split the markets out a little and I think the graph illustrates quite well some of the points I made earlier. London is clearly the price leader in Europe and is some 50% dearer than the rest of mainland Europe whereas prices in Frankfurt are a fraction of those everywhere else, or about 30 to 40% of those in London. Central European prices have primarily being driven by Paris, Amsterdam and Dublin. Most of the other, smaller regional markets have pretty much remain unchanged for as much as the past five years, though several operators we spoke to recently reported they had been able to push through modest, ie 10% price increases of late, but certainly no step change.



To look at the breakdown of one market in particular here's more detail on where pricing is in London at present, obviously looking at different power bands.

Remember, for the early years the data is fairly meaningless as it includes a wide variety of packages, today, we have to break down clearly what's being discussed.

We also now have to appreciate what power costs in each facility and I can tell you there is a wide range. In London, you can pay as little as 8p kWh or more than twice that, ie 15 or 16p

Across Europe prices range from 11cents up to the mid teens.

Pricing Issues: Impact

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- **Movement within the marketplace**
  - **To secure better prices, even if quality trade-off**
  - **To find better supplier fit**
  - **Rationalisation of space use, focus on power hungry hardware or applications**
- **Education programme**
  - **To explain what's behind the changes**
  - **To describe the current state of the market and near term outlook**
  - **To help buyers present their requirements in a new way**

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So, what's been the impact of these dramatic price changes

Firstly and perhaps unsurprisingly there has definitely been some upheaval within the market. For some companies, particularly those who are not giving much value added over and beyond space and connectivity the changes have had a dramatic impact and several buyers have been forded to make significant changes, by either reducing their capacity commitment as much as they can or even actually moving to another facility, even if perhaps there is a quality impact on the type of facility they move to. Given how hard it is to move equipment once it is installed, I don't think we've seen the end of this process yet. We are also aware of instances where customers are moving not because of price but because they are unhappy with a change in corporate focus of their current supplier, usually as a result of some of the consolidation we have already mentioned. And in the meantime, everyone else is looking closely at their use of current capacity to maximise its value, for instance, by stripping out of non-essential equipment such as development platforms that can be housed back in the office lab or comms room.

From our point of view we now spend quite a lot of time actually educating users as to why the changes. Quite often we may have someone complaining their charges are now too high and can we find them a better deal, but after we explain to them where the market is today it can be the case they are simply better of staying put as they ARE getting a good deal! For those clients with new requirements this process helps them approach the market fully informed and present their needs in a manner the operators understand, so helping the buyer's needs be taken seriously.

Summary

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- Power/cooling capacity is the driver
- The demand outstripping supply for the moment
- Pricing structure has changed
- Market dynamics - 3 months now a long time
- BroadGroup predicting prices will double again over next five years*
- More capacity will arrive, but will it be enough?

*UK Data Centres Report, Nov 2006

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So to sum up, there are some obvious conclusions to draw as well as some questions.

Clearly it is all about power these days, we can't progress any enquiry without having some power figures, it would be a waste of time. However, I wonder if this focus on power is leading to a narrowing of price differentials between large scale wholesale buyers and smaller, more retail orientated requirements. If a facility has 1000kW of capacity the operator will view that as his stock rather than floor area and we have seen some surprising results on some recent market activities where large scale pricing feels pretty close to where retail pricing is. What we can't tell yet is if this just the case of market conditions allowing this to happen and is a temporary aberration or a long term change. Given the shift to measuring capacity in terms of power and cooling perhaps it's the case that there is less economies of scale than the real estate style approach that we used in the past. In other words, beyond a certain scale construction costs are linear whether you sell a room as a single 100kW deal or 50 2kW cabinets.

We have also been surprised by how little business we are doing elsewhere at present by which I mean outside of London. Whether this is because London is a big market in its own right etc and we are actually based here I'm not sure, but the we do also feel the trend towards regional facilities, away from the main hubs is also growing for a number of reasons.

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Thank you for listening. If we have time I'll be happy to take any questions.