

# Construction goes "e"

by John Clucas

*As the hype over e-commerce dies down, and reality takes its place, some clear directions are forming for the construction industry. One thing is for certain: the future will be nothing like the past.*

While the manner in which soil is moved around a construction site is unlikely to change in the foreseeable future, the internet is rapidly changing the way in which civil contractors undertake many of their other business tasks.

The revolution is gaining momentum, and very soon an internet connection will allow electronic ordering and purchase of construction materials and machinery parts. Even used parts will be searchable via the internet, with details of price and availability. Plant will be hired and paid for via the internet,

and services will be much more easily sourced.

This will result in faster business transactions, less paperwork, less product wastage, and materials will be delivered "just in time" - saving on storage and warehousing costs.

Not only will it be possible to carry out these functions faster and more efficiently with the click of a mouse, but the cost of the products and services procured electronically is expected to come down too - for a number of reasons.

There will be greater transparency in pricing, and rogue pricing from supply chains will be a thing of the past.

There will also be a considerable shortening of the supply chain which traditionally comprises the network of raw material extractors, suppliers and processors, manufacturers and distributors. Better demand management will lessen the need for stockpiling, saving valuable working capital. It will cut the time to get new products to market,

reduce delivery times and bring suppliers and their products into the design phase of a development.

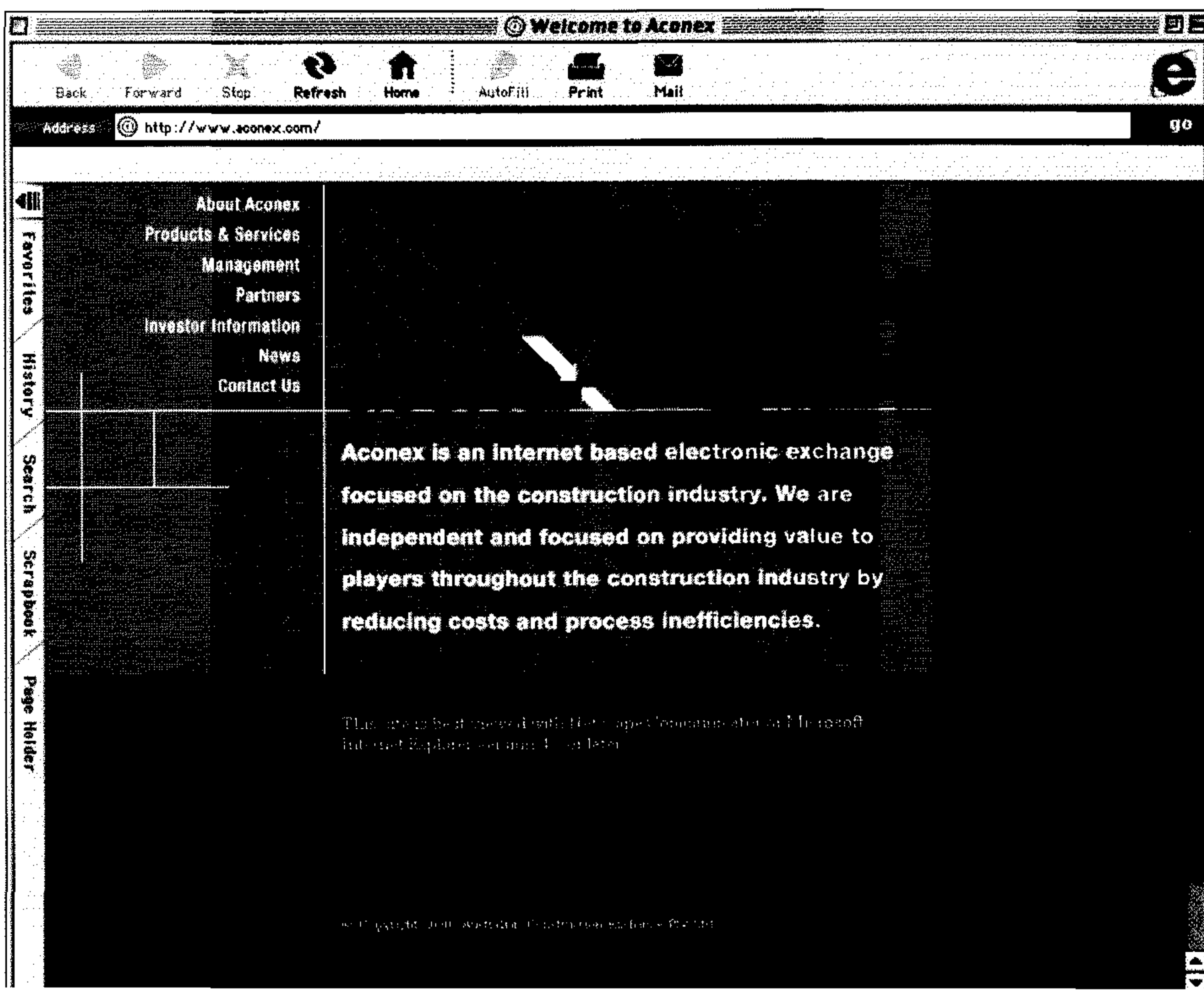
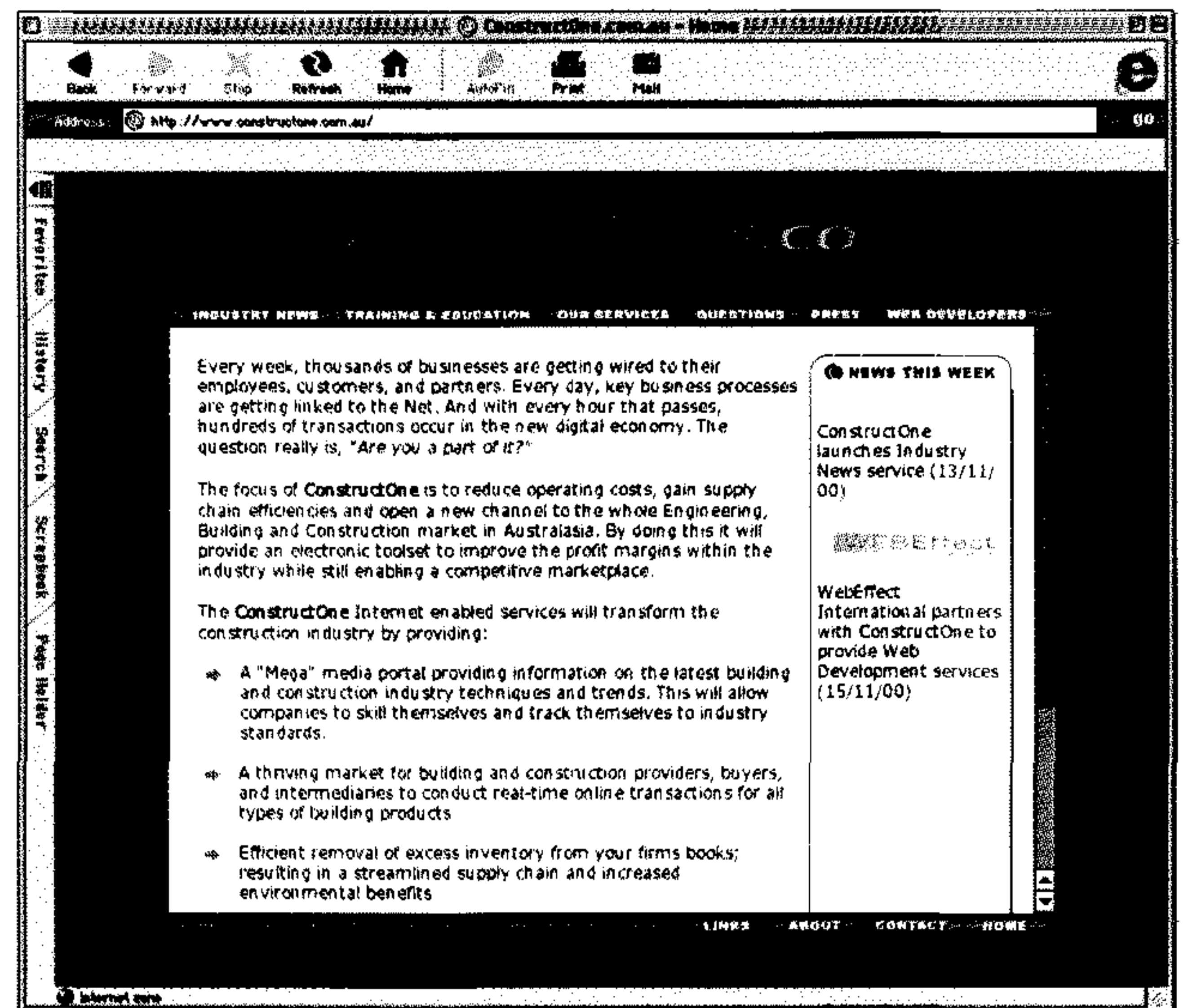
Industry sources have estimated that, when the dust settles and e-procurement is functioning efficiently, the construction industry could see savings on material supply of between 20 and 30%.

Purchasers will have a much wider choice of where to source materials, and this is certain to bring prices down as competition hots up.

Many suppliers view these developments as a threat to their profit margins and livelihood. However, suppliers that elect to offer their products online will have a much greater exposure to the industry than they could have ever hoped for previously and they will be presented with a much greater number of potential customers. In effect, for suppliers to remain competitive, they have little choice but to embrace the internet and what it offers. So, a bit of restructuring and a re-focus may be all that's required to turn a perceived threat into a boon for the business.

The fact that companies are looking to the internet to find cost cutting measures or the means of advancing their business (be it through new customers or greater operational efficiencies) will in itself induce many businesses to list and advertise their services.

So, the construction industry should be able to procure materials at reduced costs, suppliers should be better able to target clients, reach a wider group of clients and



Despite an expected reduction in transaction costs, there are unlikely to be any clear winners in business. Ultimately the community is likely to be the major beneficiary through the reduced costs of doing business. One business writer termed this result, "The sector-neutral financial consequences of e-commerce".

The construction industry's current fragmentation into hundreds of thousands of small firms and the limited computer literacy of many of those firms does little for the efficiency of the industry as a whole.

However, the internet has opened up opportunities for businesses to pool their purchasing powers and/or marketing powers, depending on which side one sits.

For example, if all the contractors in one state were to make a commitment to purchase all their road base material from a single quarry, then some pretty reasonable supply rates could probably be negotiated, and all contractors in the co-operative would benefit.

The potential for cost savings through greater collaboration is certainly driving much of the development of industry-specific exchanges or portals to the internet, but closer industry communication through an exchange will also produce many benefits less easily measured in financial terms.

With this scenario, a demand exists for website developers to pull it all together on an industry by industry basis.

For the construction industry, competition for a slice of that action is hotting up, with a number of parties battling to secure dominance of, or at least a good share of, the construction industry's potentially lucrative e-commerce activity.

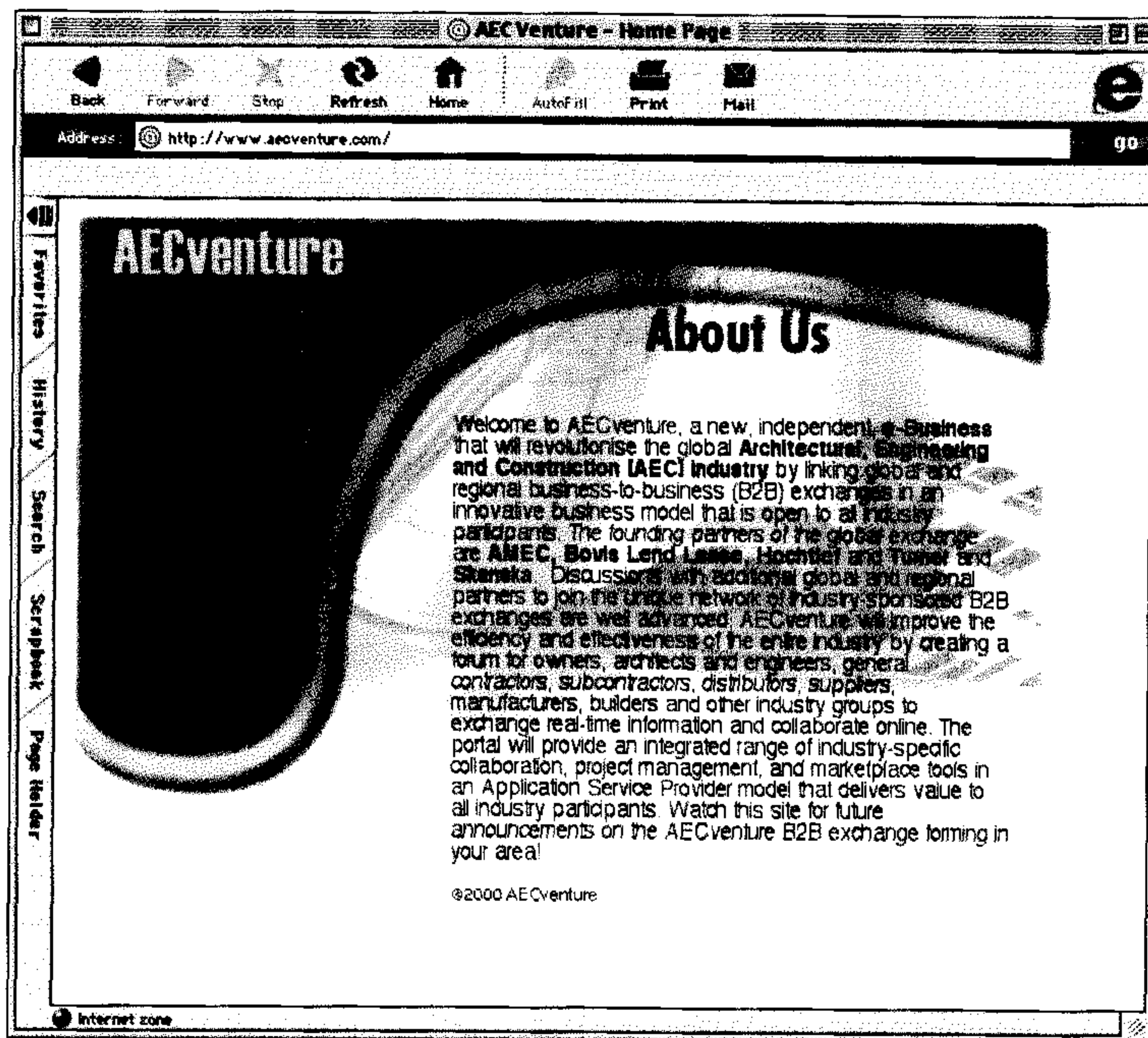
In Europe, the construction industry's electronic business to business wheels started turning a few months ago when Amec, Bovis Lend Lease, Hochtief, Turner and Skanska formed a partnership to launch the AECventure internet portal – the A, E and C respectively designating architecture, engineering and construction.

The stated aim of AECventure is to deliver value to all industry participants through real-time information exchange and online collaboration.

A snapshot of each of the partners puts the scale of the venture into perspective. Amec is an international provider of engi-

neering, service and technology to the infrastructure, manufacturing and process industries. It owns 41.6% of SPIE, the French-based international electrical engineering, IT, infrastructure and construction services company. Together, Amec and SPIE have annualised revenue in excess of US\$8bn.

The Lend Lease Group is a global real estate funds management and services group. Its subsidiary Bovis Lend Lease, which focuses on project management and construction services, has projects to the value of US\$30bn under management.



Hochtief, which is a leading international construction and project management company undertaking around US\$25bn of work last year recently acquired Texas-based Turner Corporation. Turner completed almost US\$5bn of US construction last year and claims to be the country's largest general builder.

Skanska, with annual sales exceeding US\$11bn, is one of the world's leading companies within construction-related services and project development.

According to AECventure, "The partnership will improve the efficiency and effectiveness of the entire industry by creating a forum for owners, architects and engineers, general contractors, subcontractors, distributors, suppliers, manufacturers, builders and other industry groups to exchange real-time information and collaborate online ... [delivering] value to all industry participants."

Representatives of the venture have had discussions with Leighton Holdings (of which Hochtief is a major shareholder) regarding the feasibility of developing an Australian alliance. Now Leightons is head-

ing up a ten-company team to set up an Australian equivalent. Other Australian members of the consortium include Barclay Mowlem, Boulderstone Hornibrook, Clough, Thiess, Walter Construction, Transfield and Henry Walker Eltin.

The initiative is being co-ordinated through the Australian Constructors Association and aims to provide a forum through which designers, clients, contractors, subcontractors and suppliers can call tenders, bid for work, seek products and services and promote their capabilities. At last report a feasibility plan was almost complete with a launch of the site imminent.

The CCF also has grand plans to provide civil contractors with a one-stop shop website providing information and connections to virtually every company offering a service or product to the industry.

This facility will be provided through e-Mach Discovery, a network "aimed at improving the exchange of information throughout the construction, earthmoving and mining sectors". (The role of e-Mach Discovery is expanded upon starting on the next page in this e-procurement feature).

ConstructOne is another internet venture which aims to provide an e-commerce channel for Australia's building and construction industries, acting as "a facilitator of commerce for contractors, suppliers and operators".

Walter Construction Group and Palladin Infrastructure are part of the scheme, and the proposal includes an offer to provide site users with the facility to build their own websites through ConstructOne.

Other services likely to be offered through ConstructOne include industry news, invitations to tender, listings of employment opportunities, an equipment exchange, and information on products and their supply.

Melbourne-based Aconex is the latest enterprise to enter the fray to develop an e-commerce exchange for Australia's construction industry.

Financed by private investors, Melbourne builder Pro-Build, and Australian software developer QA Software, Aconex plans to be undertaking construction industry related transactions by March next year. Deals have already been signed with Hansen Yuncken, Abigroup and Pro-Build, among others.

# CCF's civilcontractors.com is a goer

The CCF's new website has been launched. Details of the enterprise were outlined in the October edition of this magazine, but the official launch occurred at the CCF's 2000 national conference in Hobart in November.

Civilcontractors.com includes a "public" section, open to anyone browsing the worldwide web, and a secure "members-only" section, with access restricted to CCF members who subscribe to e-Mach Discovery.

Features of the "public" section include:

- summaries and highlights from the various state and territory CCF branch bulletins;
- contact details for all CCF staff around Australia;
- dates of CCF public functions and other important industry events;
- background information on CCF services, including training, OH&S, industrial relations, prequalification, environmental issues and others; and
- links to CCF member and associate member home pages.

Features of the "members-only" section include:

- all CCF state branch bulletins and other available communications to members, posted to the site as developments occur;
- access to information and advice on OH&S, awards and wage rates, training, legal issues, etc;
- full access to the e-Mach Discovery

network, allowing members to search for parts and equipment (for purchase or rent), and to list equipment for hire, specialist expertise, services, etc;

- contact details of other members; and
- latest, comprehensive industry information.

Huett said civilcontractors.com would completely change the way the CCF communicated with its members, and with the industry as a whole.

"This new development allows us to communicate with our members very quickly, and far more cost-effectively than we have been able to previously.

"Through the website and e-mail alerts, we will be able to keep members on top of major issues as they happen," he said.

"And because over the next few months, we will be moving the great majority of our

information resources over to civilcontractors.com, members will be able to access what they need, when they need it – instead of being restricted to office hours."

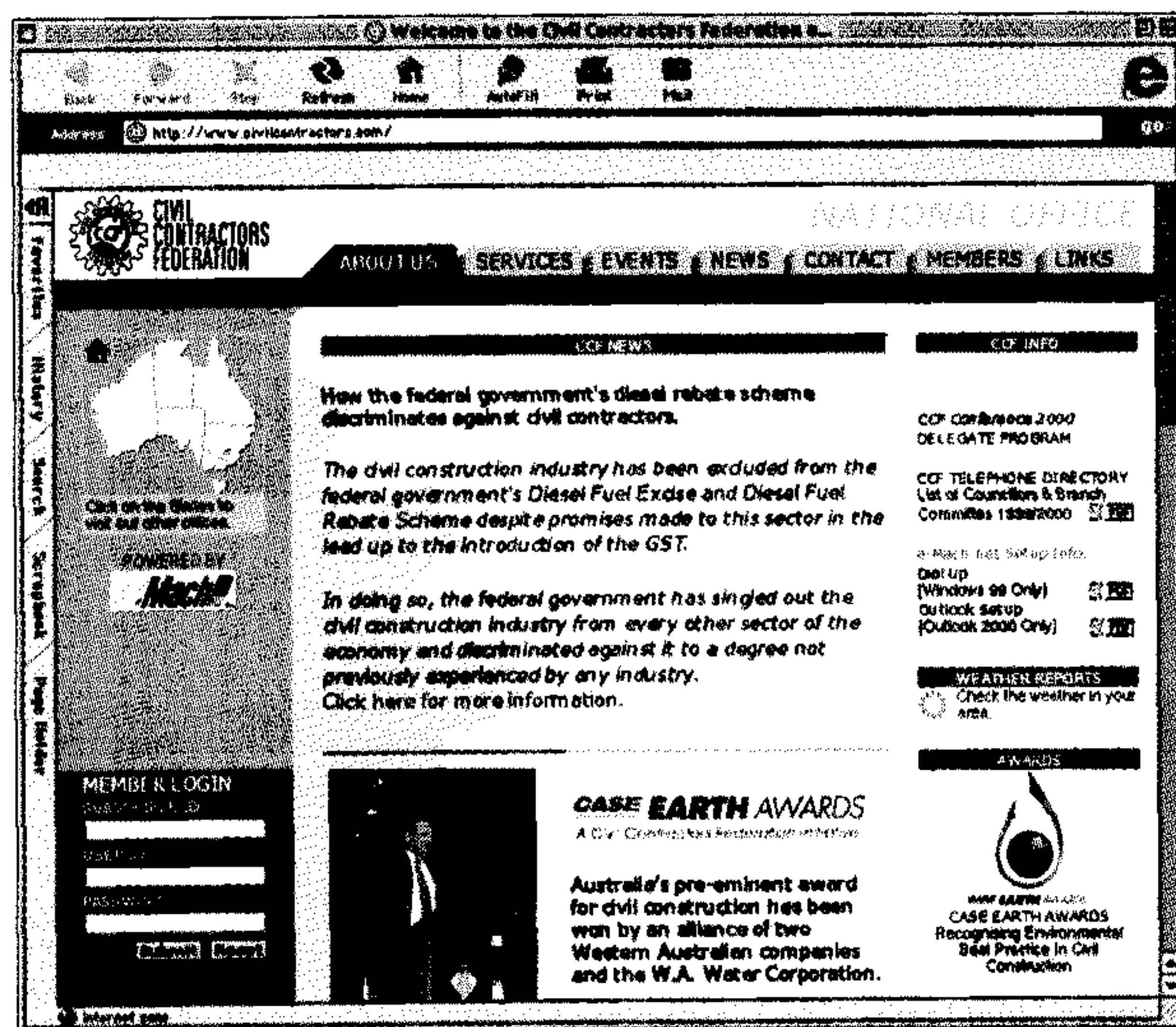
Huett said that in addition to the information resources available through civilcontractors.com, the joint venture relationship with Australian company MetalRoad would quickly bring a critical mass of contractors to the e-Mach Discovery network.

"We are keen to see as many CCF associate members and other suppliers joining e-Mach Discovery as soon as possible; it is an invaluable tool for suppliers to get their products to contractors and other end users.

"Because it's been designed specifically around this industry, by people who know construction, earthmoving and mining equipment, it uses terms and descriptions we all know and understand."

For information about joining the CCF or signing up for the members-only section of civilcontractors.com, contact the CCF national office on ph (03) 9819 0611, e-mail info@civilcontractors.com, or visit www.civilcontractors.com and go to the "Contact Us" section of the relevant state or territory branch.

For information on e-Mach Discovery, contact Pat Boucousis, MetalRoad Pty Ltd, ph (07) 3858 6000, e-mail patrick@e-mach.com, website www.e-mach.com.



## New online network for machines, parts and components

An Australian company, MetalRoad Pty Ltd, has launched a new online network aimed specifically at the construction, earthmoving, quarrying and mining sectors.

The e-Mach Discovery network is aimed at greatly simplifying the exchange of information between suppliers and end-users in these industries.

Instead of using what's become the traditional internet model of suppliers putting websites up to advertise their wares to the almost completely anonymous world-wide web – and being unable to tell who is interested in their products and services – e-Mach

Discovery takes a quite different approach.

e-Mach Discovery is not a trading exchange, but a subscription-only service where organisations are able to immediately identify those parties seeking their products and services.

The names of companies and their representatives are provided, together with phone, fax and e-mail details. Transactions and negotiations can take place in the traditional manner, or companies can use their own on-line trading and transaction systems.

Its subscription-only nature means there are no transaction fees levied by MetalRoad; once organisations have subscribed, they can

use the e-Mach Discovery network as much as they choose – with subscription rates based on usage levels, not the number of transactions.

In its early stages, e-Mach Discovery's main function will be as a parts, components and plant hire sourcing service.

It will allow equipment distributors and suppliers to list parts, components and machines they have available.

As a plant hire listing service, it will allow contractors and plant hirers to list equipment for hire.

In addition, e-Mach Discovery provides a means for suppliers to publish information

about their products and services, either as documents within the network, or through links to their own sites.

The network incorporates an industry-specific search engine that makes it much easier for users to find the information they want – and dramatically increases the chances of information published by suppliers reaching its target.

MetalRoad is in the process of adding a wide range of additional features, including a stolen equipment register, serial number guide, access to electronic parts books, specifications guides, and so on.

According to MetalRoad's managing director Pat Boucousis, the core of e-Mach Discovery is a feedback mechanism that ensures suppliers get to know who is making inquiries on items they have listed.

"This is a major departure from the one-way, anonymous – 'I can see you but you can't see me' – interaction that is typical of the Internet," he said.

"We believe that suppliers will be far more comfortable making information available on a network if they can exercise some control over who can access it."

Another feature is e-Mach Discovery's catalogue of manufacturers, machines, parts and attachments, which provides a means for subscribers to use common language to communicate.

"An important aspect of this is that it has been developed by people who know the industry extremely well," Boucousis said.

"That means it uses terminology that's familiar to contractors, miners, quarry companies, local government – anyone who uses construction and mining equipment – and their suppliers.

"So, all subscribers have a much greater chance of finding the information, products, suppliers or buyers they are looking for," he said.

For example, parts can be listed by part number, or by description (such as, say, a Cat D10N final drive).

e-Mach Discovery also has a specific feature designed for suppliers wanting to list components removed from dismantled equipment.

"Traditionally it has been very difficult for suppliers to give these products adequate market exposure," said Boucousis.

The network has been designed so that suppliers can easily upload their inventory into E-Mach Discovery and update it on a daily basis.

"Up-to-date information will be a major differentiator for the service," he said.

For machine owners, e-Mach Discovery allows them to post details of their fleet on the network, and to use this to list machines available for hire.

And because fleet details can be tied into machine serial numbers and parts numbers, the process of searching for parts and components becomes much easier and quicker.

Boucousis sees the system as taking a lot of time-consuming and tedious detail out of the parts-finding process, both for end users and for suppliers.

At the same time, it's been carefully designed not to detract from the traditional

"In how many parts operations do you have situations where a call comes in and it's answered by your most experienced parts interpreter – and it's for a fairly straightforward item like a filter or other low-value part?"

"Then while that experienced parts interpreter is attending to that, a call for a high-value component, say a transmission or an engine, comes in and is taken by someone who's just started in the job.

"They may not have the experience to handle the inquiry and the prospect starts looking elsewhere. Before you know it, you've lost the sale – and it's unlikely the customer's details are even recorded

"With Discovery, providers are able to see who is looking for parts, services or equipment they have available – and are able to allocate the most appropriate person to handle the inquiry," Boucousis said.

"Your senior parts interpreter can come in first thing in the morning, see there's an inquiry about a transmission, and get on the phone or the e-mail to the customer.

"Meanwhile, your newest parts interpreter can gain experience on the less valuable opportunities."

e-Mach Discovery launched in Australia in mid-November,

coinciding with the launch of the Civil Contractors Federation's on-line presence, civilcontractors.com.

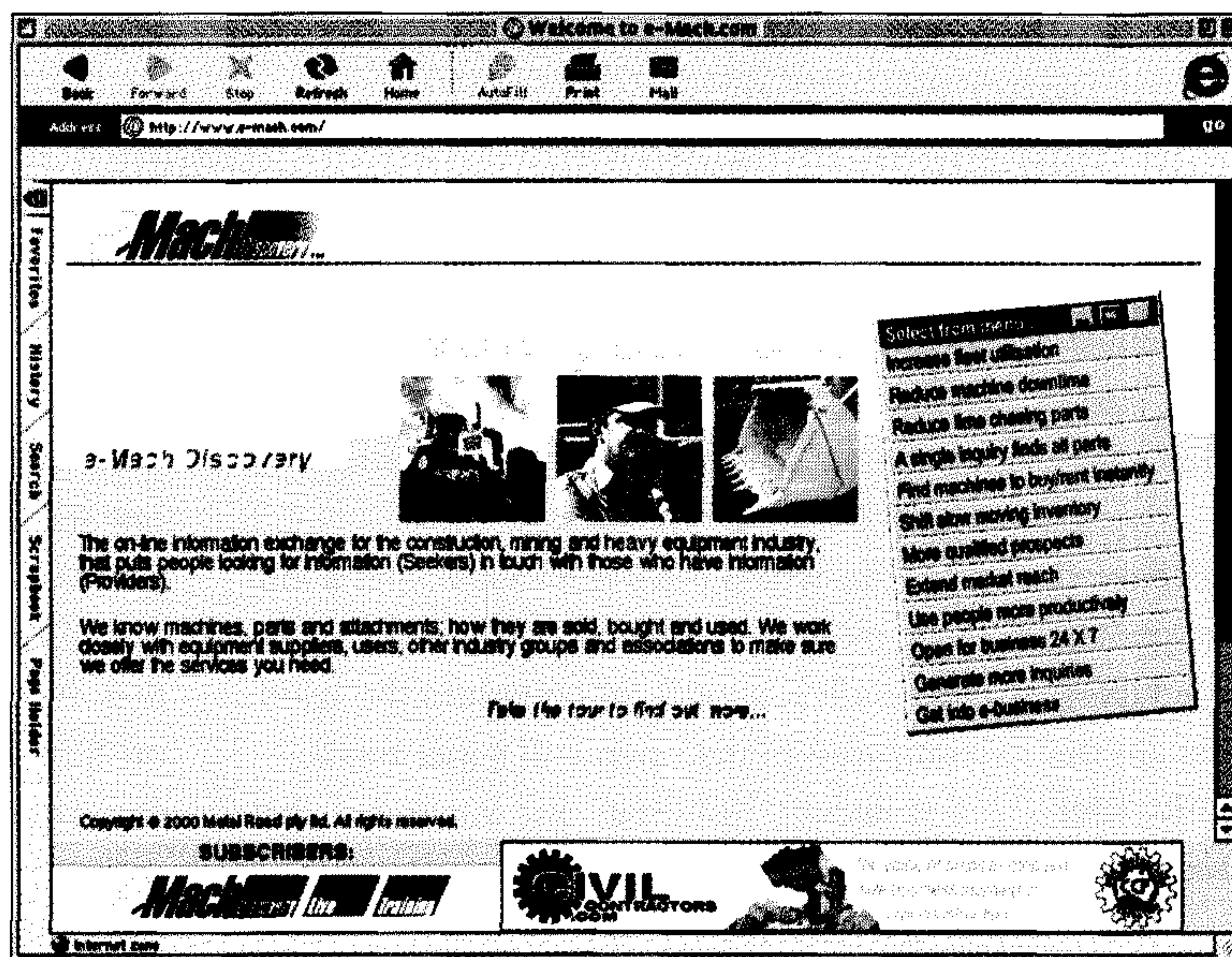
MetalRoad is hosting the federation's website [www.civilcontractors.com](http://www.civilcontractors.com), as well as providing a members-only subscription service providing access to a full range of CCF services and documents.

CCF members who subscribe to the website will also have access to the complete e-Mach Discovery service. They will be able to list equipment for hire and other services, as well as search for parts, components, equipment for hire and sale, and access other services.

In addition, e-Mach Discovery has gone live in the US under a joint venture between MetalRoad and leading construction industry publisher Randall Publishing.

Both the Australian and US arms of e-Mach Discovery will be hosted and administered from MetalRoad's Brisbane headquarters.

Further information: Pat Boucousis, MetalRoad Pty Ltd, ph (07) 3858 6000, mobile 0414 387 825, website [www.e-mach.com](http://www.e-mach.com), email [patrick@e-mach.com](mailto:patrick@e-mach.com).



interaction and negotiation processes characteristic of the industry.

"Traditionally, if an end-user wants a part, they'll phone up suppliers and start trying to track it down. If it's a hard-to-get part, that can take a lot of work.

"e-mach Discovery does all that work for them – and it can take place 24 hours a day, seven days a week. If you've got a machine that goes down at the end of a shift, or on the weekend, you may have to wait until the next business day to start hunting out parts before you can even order them.

"With Discovery, you can find out immediately who's got the parts you need – and they know you're looking for it. Buyer and seller can then get in touch and start their negotiations."

For suppliers, Boucousis sees considerable efficiencies being added to their operations.

"It's pretty well accepted in this industry that about 80% of parts inquiries are just that – they don't actually lead to a sale," he said.

"With e-Mach Discovery, full details of a potential customer's details are provided at the time of the inquiry, so a supplier with a part, component or piece of equipment being sought can follow up immediately.