

INFO TUA

Experts in steel solutions

Newsletter

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AVIS

The IPOs' fundamental mission is to boost steel consumption, and in particular within the construction sector, to demonstrate to our key targets, decision makers and construction companies, that steel is both economically and environmentally an excellent solution and that it can be recycled easily and at low cost.

Why does Arcelor wish to conduct this promotional activity on a European scale? Because we are no longer living in the days when the steel industry served primarily the defence and shipbuilding industries, two nationally strategic sectors. Today, the steel industry is multi-sectorial and international. It is therefore normal that the IPOs too should open their borders.

We consider that it is Arcelor's responsibility, as world leader in its sphere, to actively involve itself in steel promotion in Europe. Not only by contributing to the funding of all European IPOs, but by fostering a consistent and complementary approach in their actions. Our fellow steelmakers can see only advantages in this joint promotion of steel. It is to everyone's benefit. Therefore, it seems natural that they too should contribute financially.

For the moment, our priority is to encourage the IPOs to organise themselves in a network in those countries that represent Arcelor's core business, in order to increase their efficiency by eliminating duplication and by optimising the distribution of expertise.

How can this efficiency be assessed? It's a bit like football. You can look at the results, in other words the number of goals scored, but you can also consider the number of good plays. To put it another way, measure the efficiency on the basis of the effort imparted. This is what we must do for the IPOs, increase targeted and concerted actions that always have a profitable outcome.

In five to ten years, based on the growth in steel consumption, we will measure the extent to which the effort has been worthwhile.

Roland Junck

SENIOR EXECUTIVE VICE PRESIDENT, ARCELOR LONG PRODUCTS SECTOR, WITH RESPONSIBILITY FOR THE IPO MISSION



*IPO: Independent Promotion Organisation

Events

Otua's first logo.



THIS AUTUMN, OTUA CELEBRATES ITS 75th BIRTHDAY

In honour of its three quarters of a century, Otua is organising an exhibition from 3 to 5 November 2004, in the lobby of the Pacific building at La Défense.

Otua's history will be presented on a series of panels tracing its various missions, displaying the tools and publications that it has devised and continues to devise, the actions that it undertakes for the continuous promotion of steel in industry, construction, bridges and civil engineering structures, and in education. The principal change at Otua in the course of these 75 years, is that it has progressively become more outward-facing. Having been essentially a research and information resource for steelmakers, Otua has become their spokesperson for steel promotion to users, for whom it has developed numerous tools (particularly through its website) designed to assist them in steel selection and processing. In addition to this stroll through history, at lunchtimes, these three days will feature quiz-type games, based on Otua-related questions.

FOR FURTHER INFORMATION

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Since its formation in 1929, Otua has devised and produced hundreds of publications and constantly developed services to users.

Construction

STEEL ADDRESSES ITSELF TO FIRE ENGINEERING

For the second consecutive year, steel made its voice heard at the firefighters' congress held at Montpellier from 15 to 18 September 2004. Its dominant theme: fire engineering, a new more realistic and more reliable construction industry approach to fire risk.



An experimental fire, set and filmed in a Pailleron type school building, in order to study the behaviour of the steel... An Arcelor initiative a few years ago.

Photo: Monique Tanguy

As in 2003, the French Steel Federation (FFA), the National Association of Profilers of Flat Steel Products (SNPPA), the French Steel Construction Federation (SCMF) and Otua had a shared stand in order to answer all the firefighters' questions about steel's advantages when faced with fire and earthquakes. They offered the firefighters two lectures:

- one on fire engineering, by Jean-Baptiste Schleich, a safety engineer, and professor at Liège University;
- the other on the evacuation of the disabled in the event of fire, by Guylène Proulx, who is working on the Fire Risk Management Program at the Institute for Research in Construction in Ottawa (Canada).

A realistic approach to fire propagation factors

Today, fire engineering is a crucial field of endeavour for steel. It is a matter of taking into account and predicting the various determinant factors in the propagation of a fire. Until very recently, the fire stability of a building was ensured by employing a regulation based upon an obligation of means. In future, the regulation, based upon an obligation of result, will offer greater freedom in building design. Fire engineering involves an understanding of the development of fire and fumes, the safety of individuals and rescue personnel. To this end, it employs passive protection devices (alarms and detectors) and active protection devices (fume extraction, compartmentalisation and sprinklers: an automatic extinguishing system). This realistic approach to fire prevention is now incorporated in the Eurocodes.

Anticipating this change, a fire committee, of which OTUA, CTICM, SNPPA, SCMF and Arcelor are members, ensures that steel offers solutions tailored to fire engineering and is not placed at a disadvantage by the regulation.

FOR FURTHER INFORMATION

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EXCELLENT PROSPECTS FOR STEEL CONSTRUCTION IN CHINA

Last August, at the request of Arcelor, Otua visited Beijing to attend the International Steel Construction Conference in China. A country in which steel production is prodigious, but not necessarily suited, in terms of quality, to a booming construction market.

The Chinese already use steel in the Construction and Public Works sector, but insufficiently in their eyes compared to more traditional construction materials. There are several reasons for this:

- few Chinese professionals have mastered steel construction techniques and dissemination of expertise in this field is limited;
- they are unaware of the diversity of the steel construction products that are available in the world;
- regulations in respect of steel construction are archaic or even non-existent.

Highly favourable conditions for steel construction in China

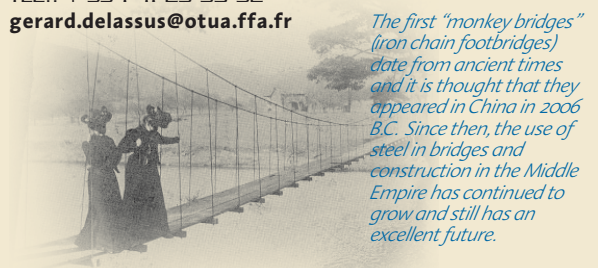
In 2003, China produced 220 million tonnes of steel, 40 million more than in 2002. In comparison, 40 million tonnes represents Arcelor's total annual global production.

From 2005, Chinese demand for steel structures for the construction of buildings alone will amount to 6 to 7 million tonnes. Furthermore, the Beijing Olympics in 2008 and the 2010 World Expo in Shanghai will boost public construction of stadia, conference centres, etc.

A superlative market for steel, subject to promoting in China its full range of construction solutions and disseminating western know-how in steel residential and civil engineering structures. This was the task that occupied Otua and Arcelor International during this international conference, attended by some 150 to 200 construction industry professionals, for the most part Chinese.

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The first "monkey bridges" (iron chain footbridges) date from ancient times and it is thought that they appeared in China in 2006 B.C. Since then, the use of steel in bridges and construction in the Middle Empire has continued to grow and still has an excellent future.

The event was reported in the Chinese specialist press.



Bridges and civil engineering structures

EUROCODES FOR BRIDGES: STEEL ANSWERS THE CALL

On 14 September, Otua held a meeting of the steelmaking members of the Bridges Working Group to discuss the new European regulations relating to civil engineering structures. To this end, it had invited Joël Raoul, of Setra (Highways technical studies unit, attached to the Ministry of Infrastructure), for a presentation of Eurocode 3 and its impact on the selection of steels for bridges.

It was a year and a half ago (February 2003) that Otua established the Bridges Working Group, whose purpose is to unite the competencies of steelmakers

(plates, beams, tubes, steel, stainless steel...)

around a common bridges strategy, with the aim of increasing steel's market share, in particular in short-span bridges.

The working group set itself the missions of

providing technical support to bridge designers, participating in research and training programmes relating to civil engineering structures, promoting new steel products to users...

Among its activities: the organisation of seminars and technical symposia in conjunction with site visits, publication of a review on the subject of bridges, lectures and classes in schools of architecture and engineering...

Familiarisation with Eurocode 3, which will come into force in 2010

The principal theme for this fifth meeting of the working group was Eurocode 3, applicable to metal and composite civil engineering structures. Having explained its scope, Joël Raoul, technical director of Setra's engineering structures technical centre, revealed the repercussions on the use of steel. In Europe in 2010, Eurocode 3 will compulsorily replace the national design codes (CM 66 in France, for

example). In order that those involved in the steel bridge sector become experienced in the use of the new regulation by that date, design offices will be

able to use this Eurocode on a voluntary basis from mid-2005. On the same date, the French government will publish the national implementation annexes specific to the technical particularities of its market.

Preparing the ground for steel

For their part, Otua and CTICM are organising Eurocodes awareness and training days to accompany this process.

The Bridges Working Group intends to contribute to ensuring that steel solutions are tailored to the European regulation, but also to ensure that this regulation does not place steel at a disadvantage. Some of its members represent the steel industry on standardisation bodies that are preparing, inter alia, additional rules authorising the use in bridges of high yield steels (700 MPa).

In 2010, steel and composite bridges (here, the Jaulny viaduct in France) will be subject to the new European regulation and more specifically Eurocode 3.

Archi : B. de Kosmy



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Sustainable development

FINALISATION OF THE NEW AFNOR STANDARD NF P 01-010 "DECLARATION OF THE ENVIRONMENTAL AND HEALTH CHARACTERISTICS OF CONSTRUCTION PRODUCTS"

Otua contributed to the validation work on this standard, which defines the principles applicable to the provision of information on the environmental and health characteristics of construction products.

Otua contributed as a member of AFNOR committee Po1E and as a member of the AIMCC (Association of Construction Materials, Components and Equipment Industries) Environment committee, whose precursory work served as a basis for the formulation of the experimental version of the standard, published in April 2001.

In particular, Otua requested significant modifications to the article relating to the impact of climate change and the consideration of certain greenhouse gases.

To support its action and its arguments, it called upon the expertise of Arcelor Research and Arcelor Corporate Environment, as well as the experience of BN Acier (French Steel Industry Standardization Office).

This standard establishes a common basis for the provision of objective information, both qualitative and quantitative. It is intended to assist designers who wish to take into account in product and material selection not only their fitness for purpose but also environmental and health criteria.

The latest version of the standard should be published this autumn.

More in the next issue!

POUR EN SAVOIR +

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Education - Training

THE RETURN OF ACIER FORCE NEUF

Acier Force Neuf, the travelling exhibition devised by Otua to tour schools of engineering and design, has an extensive programme for the 2004-2005 academic year. New schools in which to promote awareness and a series of lectures and site visits for schools that have already hosted the exhibition.

This year, the exhibition and associated lectures and site visits should reach 25 schools.

Among the new host establishments, we can mention EEIGM in Nancy, ESITC in Metz, INSA in Rennes, Ecole Centrale in Nantes, ENSAM in Angers, the Eric Tabarly secondary school at Sables d'Olonne...

For schools that have already been visited and that were clearly won over, Otua offers new lectures: by Mel Byars, designer, Jean Michel Vigo (Otua's expert on bridges and engineering), Suzanne Mathieu (Otua's surface treatment expert), or Jean Dalsheimer (Otua's sustainable development expert).

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Website Hit

NEW VERSION OF APPROACIER.

More user-friendly and more complete, these are the principal qualities of the new version of Approacier, available on Otua's website since the end of August.

A quick reminder: Approacier is an online service that Otua offers free of charge to steel users. For a given product and grade of steel, in a chosen department or region, they can obtain a list of stockholders registered with the site. The innovation is that the database has expanded and is no longer confined solely to steel products. It now also lists the services provided by the stockholders: cutting to length, polishing, coating, etc. Moreover, suppliers access to the database has been simplified, enabling them to update it more easily and regularly and to carry out online monitoring of their hit statistics.

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THE LATEST THEMATIC CASE STUDY: APPRAISAL OF THE MADE OF STEEL CAMPAIGN

Did you know that InfOtua also publishes complete and simplified reports on topical steel-related subjects. These reports are available for viewing and downloading on the Otua website, under the heading **Publications**.

Subjects already covered :

- Steel and sustainable development in construction (January 2004),
- Steel bridges and civil engineering structures (March 2004),
- Education on the subject of steel and its various trades (June 2004),
- Appraisal of the Made of steel campaign (October 2004)

These reports are available in English and in French.



Diary

13 October 2004

AIMCC (Association of Construction Materials, Components and Equipment Industries) **is organising an information day on the subject of the environmental and health declaration forms**

(see the article on p 3) at the "Maison de la Mécanique" (engineering industries building), in Paris.

21 October 2004

Technical symposium on the subject of the Eastern France European High Speed Railway,

which has 335 civil engineering structures. A symposium organised by Otua in partnership with RFF (the French rail infrastructure management company) and the Ministry of Public Works Technical Studies Centre - East. Among the highlights planned for this event is a visit to the Moselle viaduct, the longest on the line at 1510 metres.

The National Assembly is holding a meeting of its housing committee at Millau.

Otua is organising a visit to the viaduct for this occasion.

22 November 2004

The CIA (Steel Information Centre, in Belgium) **is organising a conference in Brussels on the subject of steel and construction.**

At this event, the Centre will present the prizes for the 2004 Steel Construction Competition and the 2003-2004 Steel Prize for Students. As always all the projects that were entered for the competition, will be compiled into a compendium intended for construction professionals.

30 November 2004

Training on the application of the Eurocodes in steel construction,

organised in Paris by Otua and CTICM. An event designed to familiarise construction professionals with the Eurocodes in respect of steel construction.

Awards ceremony for the most attractive steel structure (PBOM competition)

by the French Steel Construction Federation (SCMF). Open to all teams that have produced steel structures during the two preceding calendar years, this biennial competition is adjudicated by a totally independent jury drawn from the Profession, of which Otua is a member. At this event, APK will also award his prize, which recognises a well-known personality in the steel construction community, who, through their projects or publications, contributes to increased awareness of steel.

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Supplement - Interview



EUROPEANISATION OF TECHNICAL STEEL PROMOTION

Since January 2004, Sylvie Pététin, Chairman of Otua, has broadened her sphere of activities. She is not abandoning steel promotion, quite the contrary. Arcelor has in fact entrusted her with the mission of endowing this promotion with a European dimension. More specifically, it is a matter of coordinating the actions of the IPOs (Independent Promotion Organisations) in the countries in which the Group's principal European markets are concentrated. In France, Belgium, Spain and Italy, the IPOs are therefore beginning to organise into a network. Interview.

Since January 2004, Sylvie Pététin has been entrusted by Arcelor with the creation of synergies between the various European IPOs. She is also Managing Director of APTA, a brand new IPO in Madrid, Spain, and Chairman of Otua.



InfOtua : Why has Arcelor instigated this new European mission?

Sylvie Pététin : "Generic" as opposed to commercial steel promotion has long been conducted by bodies such as Otua (in France), CIA (in Belgium and Luxembourg), SIZ (in Germany)

These bodies comprise 133 people in Europe and a total budget of more than 17 million euros. The steelmakers make a major contribution to this budget because they attach great importance to steel promotion. The Arcelor group, for its part, is a major sponsor of the IPOs (to the tune of almost 5 million euros) and supports them because it truly believes that these bodies handle a large proportion of promotion. It expects of them nothing less than the greatest effectiveness.

Arcelor's Management Board has therefore decided to entrust me with this coordination function in respect of technical promotion, reporting to Roland Junck, Senior Executive Vice President of Arcelor. It is a question of having an overall vision of the Group's requirements in terms of promotion, in order to guide the IPOs' strategy, but also to aggregate them, to ensure that their expertise and experience are pooled. In fact, the IPOs are being asked to implement the synergies necessary to increase their offer of services to customers, and thus best cover their requirements.

Today, 4 IPOs are working together to create this network: CIA (Belgium and Luxembourg), Promozione Acciaio (Italy), OTUA (France) and APTA (Spain).

In practical terms, how are you going to create these synergies?

Some IPOs already maintain mutual relationships for the exchange of experience and event coordination. The idea is to operate as a virtual network, in other words without an overarching superstructure above the IPOs. A good practices charter will serve as a compact between the IPOs who are members of this network. There are many competencies, initiatives and ideas, and much expertise, that these bodies can pool. It is not particularly necessary for each one to have on site all specialisms, nor specialists in every subject (structural calculations, fire engineering, etc.). Most of the time, the experts have a vision that transcends geographic frontiers. One can therefore imagine that each IPO develops a field of expertise at a European level, and that this expertise is available to the other IPOs on a consultancy basis, in support of the national competencies, necessary to maintain and develop local contacts. Naturally, each IPO retains control of its contacts, the expert only being called upon if needed. It is a typical organisational structure in companies: researchers and experts are called upon by technico-commercial personnel when the need arises. And by virtue of the feedback from the technico-commercial personnel, the expert's experience is enhanced. One can therefore summarise by saying that the IPOs too must apply the maxim: "think European, act local". For the IPOs' experts, this acquisition of a European dimension is an opportunity for personal development. And for the IPOs, it is an opportunity to expand their sphere of competence and to increase their offer of services.

Can everything be pooled?

No, certainly not. We wish to avoid duplication between organisations, but in certain cases this are necessary for cultural reasons. Education, for example, is a field that has to be handled on a national basis. On the other hand, sustainable development or the monitoring of materials are subjects that can perfectly well be pooled. Similarly, the APC (Acier Pour Construire) review must henceforth assume a European dimension. Sometimes, it is possible to share resources: for example, the CIA, in Belgium, has developed a training programme of evening classes on the subject of Eurocodes 3 and 4, which could be transposed to France since there is no language problem.

Are there currently major disparities between organisations, in terms of priorities, modus operandi, etc.?

In general, no. The priorities are the same, steel's position in each country (Belgium, Luxembourg, Spain, France, Italy) is often very similar.

The differences are essentially in practices, the way of approaching promotion. The reasons are essentially historical. Certain bodies are very long-established, such as OTUA, which is celebrating its 75th birthday this year, or the CIA, which has been in existence for 72 years.

As for the issues, they are very similar from country to country: steel-related education continues to diminish, we observe a lack of steel know-how among current and future construction professionals in particular, and in consequence, we find in all quarters too low a proportion of steel in residential and office buildings.

However, one point unites us: namely regulation, with the publication of the Eurocodes. From 2010, construction will conform to the same rules in all European countries, which will facilitate synergies and joint actions in this area. In fact, the regulation has immediate consequences with regard to the use of materials, so it is vital not only to monitor it attentively, but also to sit on the committees that are formulating these regulations.

Finally, in all countries, the IPOs have the same principal target audiences: regulatory bodies, construction professionals (architects, consulting engineers, contractors) and educators (schools of engineering and architecture).

What are your current priorities?

The priority in terms of use sector is construction, because it is the only sector in which steel still has major development potential in Europe, even if, in this respect, there are disparities between countries.

And in terms of action, the current priority is to examine each IPO's good practices in order to list the resources and initiatives developed by each of them, to compare requirements in each country, before taking steps to distribute the competencies and know-how in an appropriate manner.

In this area, we are making rapid progress. The directors of the IPOs concerned meet every two months in order to decide together what should be shared or transferred. These regular meetings are highly productive and the initial results of this teamwork will see the light at the beginning of 2005.

THREE CATEGORIES OF IPOs IN EUROPE

■ Bodies established by the steel industry for the promotion of steels:

- multi-market generalists such as Otua and SIZ.
- specialists, dedicated to construction: CIA, SCI, Apta, Promozione Acciaio ...

■ Bodies associating the federations of steel construction companies and steelmakers, dedicated to steel construction:

- bodies managed jointly by the steelmakers and the national steel construction federations (Bouwen met Staal in the Netherlands and Bauen mit Stahl in Germany)
- bodies managed by the Steel Construction federations or technical centres (e.g. SZS in Switzerland, ECCS for Europe).

■ Bodies dedicated to stainless steels.

APTA : Asociacion para la Promocion Tecnica del Acero (Spain)

BMS : Bauen Mit Stahl (Germany)

BmS : Bouwen met Staal (Netherlands)

CIA : Centre Information Acier (Belgium)

DSI : Dansk Stålinstitut (Denmark)

ECCS : European Convention for Constructional Steelwork (Belgium)

FCSA : Finnish Constructional Steelwork Association (Finland)

ICT : Instituto para la Construcción Tubular (Spain)

NS : Norske Stalgruppen (Norway)

Otua : Office Technique pour l'Utilisation de l'Acier (France)

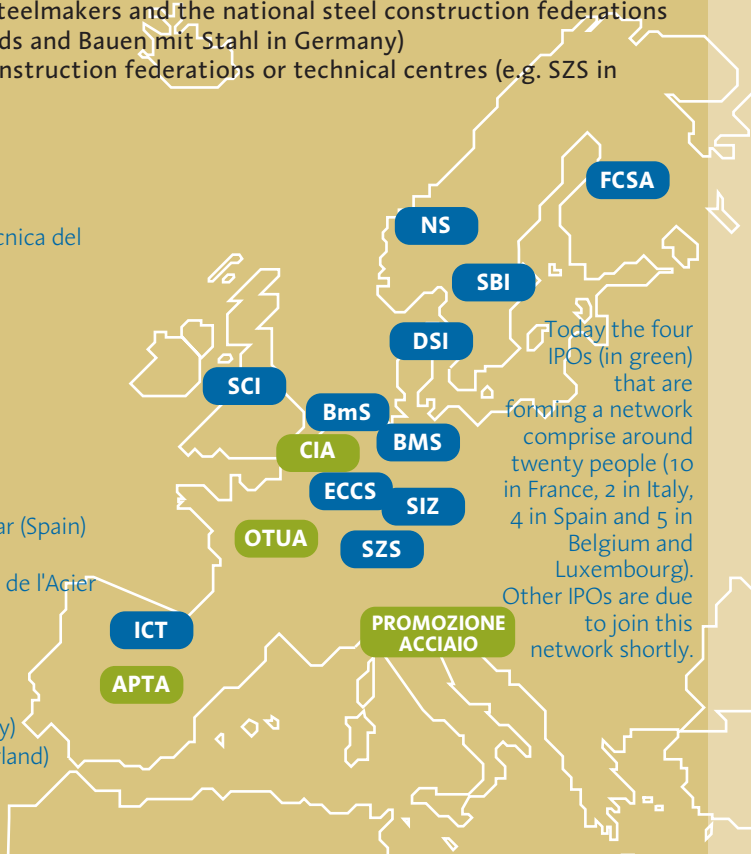
PROMOZIONE ACCIAIO (Italy)

SBI : StålbjggnadsInstitutet (Sweden)

SCI : Steel Construction Institute (UK)

SIZ : Stahl Information Zentrum (Germany)

SZS : Stahlbau Zentrum Schweiz (Switzerland)



Today the four IPOs (in green) that are forming a network comprise around twenty people (10 in France, 2 in Italy, 4 in Spain and 5 in Belgium and Luxembourg). Other IPOs are due to join this network shortly.