Ordsall Chord, Manchester – Severfield (UK) Ltd
BCSA Limited is the national organisation for the steel construction industry: its Steelwork Contractor Members undertake the design, fabrication and erection of steelwork for all forms of construction in building and civil engineering. Industry Members are those principal companies involved in the direct supply to all or some Members of components, materials or products. Corporate Members are clients, main contractors, professional offices, educational establishments etc which support the development of national specifications, quality, fabrication and erection techniques, overall industry efficiency and good practice.

The principal objectives of the Association are to promote the use of structural steelwork; to assist specifiers and clients; to ensure that the capabilities and activities of the industry are widely understood and to provide members with professional services in technical, commercial, contractual, certification and health and safety matters. The Association’s aim is to influence the trading environment in which member companies have to operate in order to improve their profitability.

The Review covers the period July 2017 to June 2018

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introduction

Looking back on 2017/18 and forward to 2018/19, there is no doubt that the construction industry is on the cusp of major change, much of which is very overdue.

Of course, government, consultants, industry experts and those of us who actually work in the industry have all talked about the need for change for decades. Unfortunately, that change has not been forthcoming, until now. So what changes are likely?

We will certainly see changes to the way the construction sector is regulated as a result of the independent review of building regulations and fire safety undertaken by Dame Judith Hackitt. The review, which was prompted by the tragedy of Grenfell Tower, provides recommendations for change to the future building regulatory system to ensure that the buildings we all live and work in are safe. We expect that, as these recommendations are rolled out, we will see a greater level of scrutiny from a design, product quality and actual construction perspective. And we firmly hope that we end up with a simpler and clearer regulatory system.
The collapse of Carillion has shone a light on what Tier 2 contractors have known for a long time – that contractual and payment terms must change throughout the construction supply chain. Although BCSA and other trade associations are lobbying for legislation on retentions, most of the change arising from this calamitous event is less likely to be driven by legislation but more by the collective will of the industry and government – a much more difficult prospect.

As a highly active trade association, BCSA and its committees are contributing to government and other working groups driving through these issues. BCSA members are also active lobbyists in their own right, helping the structural steelwork sector to have its voice heard on the issues that matter.

As the regulatory and commercial changes take hold, BCSA members are well placed to adapt. Already the structural steelwork sector and its member companies have a solid track record of adapting to change including CE Marking, BIM Level 2 and new industry training programmes. BCSA members already welcome early contractual involvement with the main contractor and understand that by engaging early, the steelwork contractor can input to the design, often reduce costs, and even shorten the programme.

We would like to thank all our members who provide the support for our Association to thrive. The contribution so many of you make to the Association and the industry is invaluable and is the reason BCSA is able to support members with key services, advice and programmes in a sector where change is imminent.

**BCSA steelwork contractor members**
- Are independently assessed annually to ensure that they are competent to undertake various types and size of project.
- Are pre-qualified to PAS 91.
- Are awarded mutual recognition under Safety Schemes in Procurement (SSIP).

**all members**
- Comply with CE Marking as required by law.
- Have access to BCSA’s member resources and one-on-one advice, so they are up-to-date with changes to codes and standards.

Tim Outeridge  
President

Sarah McCann-Bartlett  
Director General
commercial and contracts

Promoting fair procurement practices and conditions of contract in order to improve members’ commercial position

BCSA’s commercial and contracts function provides help and support for members to improve their commercial position. It does this through the provision of direct advice to and training of members, through projects initiated and managed by the Commercial and Contracts Committee, through liaison with Government and industry bodies and by the provision of general guidance.

BCSA’s Commercial and Contracts Committee provides the primary forum for anonymised discussion of general industry issues. This Committee also decides upon and manages individual projects that it considers will be of benefit to all members. Projects undertaken in 2017/18 are discussed below.

Provision of Seminars

Seminars on ‘Reducing Risks in Construction Contracts’ were held in the autumn of 2017. These covered:

- Risks pre-contract and during the contract
- Payment scams and supplier finance
- Letters of intent, bonds, warranties and guarantees
- What can be done about risk?
- Project Bank Accounts, trust funds and alliancing

Carillion

BCSA responded quickly to the Carillion collapse, representing the sector on the government’s Carillion Trade Association Forum, gathering data, information and issues to feed back to government. BCSA continues to lobby for change in the wake of the collapse.

Onerous Clauses in Subcontracts

This new project aims to create a spreadsheet on which members will be able to track the progress of negotiations on their subcontract documents, at the same time allowing them to view a succinct summary of the implications of common onerous clauses.

Liaison with Government and Industry Bodies

BCSA represented the views of the steel construction industry to the Westminster and devolved Governments and to other industry bodies - in particular, SEC Group, CBI, Build UK and the Construction Industry Council Liability Panel.

Retentions

BCSA members and staff continue to campaign on the issue of retentions. As an important step on the way to their complete eradication, BCSA believes strongly that retention monies deducted from payments should be protected from upstream insolvency and abuse. One way of doing this is via a Retention Deposit Scheme and so BCSA supported and continues to support the 10-minute Rule Bill introduced into the House of
Car park, Longbridge – galvanizing by Wedge Group Galvanizing Ltd, fabrication by James Killelea & Co Ltd

Feature staircase and atrium balustrade, BBC Wales building, Cardiff – Taunton Fabrications Ltd

Forres railway station and footbridge – AJ Engineering & Construction Services Ltd

Piling testing beams with capacity up to 1700 tonnes – Cementation Skanska Fabrications
commercial and contracts

Promoting fair procurement practices and conditions of contract in order to improve members’ commercial position

Commons by Peter Aldous MP. Many BCSA members have asked their MPs to support the Bill. Additionally, after consultation with its members, BCSA responded to the Government’s consultation on retentions and awaits Government’s response.

At the same time, BCSA continues to back Build UK in its efforts to get rid of retentions altogether.

Amendments to the Construction Act

BCSA also responded to the Government’s consultation on the 2009 amendments to the Construction Act. Overall, these have worked well but the payment structure set out in the amendments is unnecessarily complex and needs to be simplified. One important issue that the 2009 amendments did not deal with is the ‘process plant’ exclusion from the Construction Act – in particular, erection of steelwork that supports or allows access to plant does not benefit from the protections afforded by the Act. BCSA continues to lobby for the abolition of this exclusion.

GDPR

BCSA continues to give general advice and guidance to members in this area as well as answering specific member queries.

Provision of Direct Advice to Members

BCSA’s Legal and Contractual Affairs staff gave specific legal and contractual advice to BCSA members, undertook pre-contractual reviews of contract conditions and other documents, and gave preliminary advice on claims and queries. In particular, BCSA gave assistance and regular updates to members following on from the Carillion liquidation in early 2018 as well as answering specific queries on the issue.

In addition, BCSA members had access to a range of helplines free at point of use, covering employment and other areas of business law, Scottish law and Irish law and contracts.

Provision of General Guidance

Members continued to receive general contractual and legal information via several routes, including memoranda on individual issues and legal/commercial updates; documents and checklists giving general information, maintained for members on the Members’ Area of the BCSA website, including a range of model documents and templates to assist members in managing their contracts.

More detailed legal knowledge can be accessed from the Contractual Handbook, which is also freely available to members on the Members’ Area of the website.

future projects

• A 2018 autumn seminar series.
• The Contractual Handbook is being updated in 2018.
process and technical

Assisting members to deliver quality, cost-effectiveness and buildability

BCSA’s Process and Technical team supports its members by providing them with technical advice on a range of subjects and participating on national and European code committees. Some of the projects undertaken in 2017/18 are described below.

Advice to Members
BCSA provided comprehensive technical advice and support to member companies, clients, specifiers, designers and contractors. This ongoing service included:

• Responding to specific technical enquiries
• Member visits to advise on fabrication and welding systems
• Advice on CE Marking and Building Information Modelling
• Advice on specifications and interpretation of design and execution standards

BCSA Steelwork Contractor Members also receive complimentary membership of the Steel Construction Institute (SCI) as part of their BCSA membership package.

CE Marking and the Construction Products Regulation
In 2017/18 BCSA provided advice on CE Marking to BCSA members and continued to educate the wider construction industry on CE Marking.

BCSA continued its partnership with Kent County Council through a Primary Authority Agreement (PAA). Through the PAA, Kent County Council Trading Standards is now an ‘expert’ on the constructional steelwork industry and can provide authoritative and reliable advice on CE Marking compliance. In 2017 the PAA was expanded to include all UK BCSA members.

Building Information Modelling
The Steel Construction Building Information Modelling (BIM) Charter was established to enable companies to be certified against the requirements of both PAS 91-2013 and PAS 1192-2:2013. Compliance with the Charter demonstrates that the company has a documented policy, systems and procedures to achieve ‘Level 2 BIM’ maturity as defined by PAS 1192-2:2013.

Grenfell Tower Industry Response Group
Following the tragic events at Grenfell Tower on 14 June 2017, BCSA was invited to participate in the ‘Grenfell Tower Industry Response Group’ coordinated by Build UK. The group has provided input into the government’s response to the Grenfell Tower fire, including the government building safety programme and Dame Judith Hackitt’s independent review of Building Regulations and Fire Safety.

BCSA issued several memoranda to its members describing the measures taken by Government following the Grenfell Tower fire. BCSA will continue to play an active role in the Grenfell Tower Industry Response Group during 2018/19 and will provide its members with regular updates.
Infilling of existing central light cores to provide additional commercial floor space, Greater London House, Hampstead – SDM Fabrication Ltd

100 Bishopsgate Tower, London – ComFlor® composite floor decking and insitu supplied by Tata Steel, fabrication by William Hare

New Headquarters for Hamptons Group, Newcastle-under-Lyme – ASA Steel Structures Ltd

Voortman V550-7 flat and angle processing machine – Voortman Steel Machinery
process and technical
Assisting members to deliver quality, cost-effectiveness and buildability

Technical Strategy
The European structural design standards, the Eurocodes, are being revised over the next three to five years and a new set of Eurocodes will be issued from 2020 onwards. Once this revision is complete, BCSA’s current suite of design guides will require significant revision to comply with the new standards. This will take several years and considerable resources. BCSA has surveyed its members and reviewed the number of downloads for each design guide on www.steelconstruction.info in order to identify the highest priority design guides for updating.

Specification for Intumescent Paints
In February 2018 BCSA issued a memorandum to its member companies on ‘Specifying the Right Intumescent Paint’. Two types of intumescent paint are generally used in the UK – acrylic based and epoxy based. These perform differently in wet environments and it is important to specify the right intumescent for the environmental conditions. Acrylic based paints do not perform well in wet environments and should only be specified for internal ‘out of the weather’ steelwork. Epoxy can be used on any external steel that is permanently exposed to weather, as well as those parts of the structure that are likely to be exposed to frequent rain water run-off.

Tekla Structures Users Group
In 2016 BCSA formed the ‘Tekla Structures Users Group’ to act as a forum for discussion and enhancement of the software ‘Tekla Structures’. The group represents the collective views of the UK’s steel construction industry and is the first group in the world to represent national, rather than individual company, needs. The group has been instrumental in achieving significant changes to the standard fabrication drawings produced by ‘Tekla Structures’, with the ‘Tekla Structures’ 2017i release incorporating these improvements.

The group is beginning to look towards the future and the software needs of steelwork contractors in the next five to 10 years.

Mega-Shed Group
A number of significant changes to the construction of large steel sheds have taken place over the last 20 years. In light of these changes BCSA established a Mega-Shed Group to review the current design standards for large portal frames. The group held its first meeting in March 2017 and meetings continued in 2017/18.

Technical Development Programme
In 2017/18 BCSA and Steel for Life delivered a significant programme of technical development activity including:

- A design guide for connecting structural steel beams to concrete core walls
- New design guidance on brittle fracture and the selection of steel sub-grades
- A series of model answers that present steel solutions for selected questions in previous Institution of Structural Engineers’ chartered membership examinations
- A study on the moment-rotation characteristics of S355 fin plates to validate the assumption of nominally-pinned connections
process and technical

Assisting members to deliver quality, cost-effectiveness and buildability

www.steelconstruction.info

The www.steelconstruction.info web site, which was launched in 2012, was updated regularly with the latest technical information and case studies, and continues to be an excellent source of information on steel construction for the wider construction industry.

New articles and content added in 2017/18 included:

- Project case studies
- Quarterly updates to articles covering the cost of structural steelwork
- Details of the 2017 SSDA winning projects
- The second NSC Technical Digest
- The following publications have been uploaded and embedded:
  - SCI-P416 The design of cast-in plates
  - SCI-P419 Brittle fracture: selection of steel sub-grade to BS EN 1993-1-10
  - Three model answers to questions in previous IStructE exams
- Details of SSDA Award-winning projects from the previous 49 years to mark the SSDA’s 50th anniversary in 2018

Over the year, approximately 50% of the entire content of the website was reviewed and updated as part of a formal maintenance programme to ensure that technical information on the website remains up-to-date.

The website received a monthly average of 192,000 visits in the 12 months to March 2018.

Codes and Standards

BCSA is represented on key BSI, CEN and European technical committees and strives to provide practical advice to shape and influence the development of new codes and standards and the maintenance of existing codes and standards. These standards include:

- National and European design and execution standards
- Product standards (including bolts and welds)
- Harmonised standards for CE Marking

Key developments in these standards in 2017/18 included:

- Input into the amendments of EN 1993-1-1, EN 1993-1-8, EN 1090-1 and EN 1090-2
- The publication of the new standard EN 1090-4 ‘Execution of cold-formed structural steel elements and cold-formed structures for roof, ceiling, floor and wall applications’
- Input into the systematic review of the Eurocodes
future projects

- A new programme of technical development to support the objectives of Steel for Life.
- Development of a new and more interactive version of the National Structural Steelwork Specification that is fully aligned with EN 1090-2 and which includes requirements for Execution Class 3 structures.
- Updating the Typical Welding Procedure Specifications publication to align it with the revised BS EN ISO 15614-1 and include higher strength steels (up to S460).
- Review of the design standards for large portal frames.
- Ongoing maintenance of www.steelconstruction.info.
Steel's sustainability credentials continued to improve further in 2017/18 with the recent switch of emphasis on sustainability in the UK economy to procurement, responsible sourcing, sustainable supply chains, social value assessment and measuring the circular economy. Additionally, the focus on the more robust cradle-to-cradle (reuse) approach to carbon accounting continues to result in a greater understanding of steel's superior sustainability performance as a structural framing material.

BCSA Sustainability Group

BCSA’s Sustainability Group continued to meet in 2017 /18. It exists to anticipate the opportunities for the steel construction sector and assist the structural steelwork supply chain to meet the sustainability requirements of clients.

Attitudinal Survey

Steel for Life’s 2017 attitudinal survey showed once again that clients, specifiers and main contractors think that steel is a more sustainable construction material than concrete. As part of the survey, steel was compared against three other competing materials; concrete, timber and masonry. Clients rated steelwork as the most sustainable material with architects, contractors, structural engineers and quantity surveyors rating steel as the second/joint second most sustainable material.

Sustainable Procurement

Responsible sourcing, sustainable supply chains, social value assessment on new projects, and measuring the circular economy, which came to the fore in 2016, continued to drive sustainable procurement. Steelwork is well placed to meet the challenges that arise from this change of focus from more quantitative measures of sustainability like carbon accounting.

This change of emphasis was supported by Public Procurement Note 16/15, designed to assist UK steelmakers in connection with large government construction projects. The Procurement Note focused on sustainable sourcing, skills, training and employment. More recently modern slavery reporting requirements have also started to flow through to construction procurement requirements.

With the change in emphasis, a number of clients are requiring that their contractors and suppliers are accredited to a scheme in connection with sustainable procurement. For steelwork contractors, purchasing steel from a BES 6001 Framework Standard for the Responsible Sourcing of Construction Products certified supplier should be sufficient, however a number have chosen to become certified to BES 6001 themselves or to the BCSA’s Steel Construction Sustainability Charter. BCSA continued to assist members in complying with the requirements of the various schemes.
sustainability

Steel’s sustainability credentials

Reuse of Steel and the Circular Economy

Reuse offers significant potential in terms of resource efficiency and carbon emission savings. The properties of steelwork make it the only major structural framing material that is inherently reusable. Complete steel structures may be dismantled and reused elsewhere at the end of their initial life, alternatively steelwork from existing projects may be reused in new structures. With a growing emphasis on the circular economy this is a major advantage for steelwork over other structural framing materials in the domains of sustainability and procurement. Any steelwork which is not reused may be recycled; it then re-enters the supply chain having been converted into new materials and products. BCSA continues to assist with the developing of a greater understanding of the routes to market for reused and recycled steel.

future projects

- Monitoring developments in the reuse of steel.
- Supporting the responsible sourcing of steel.
- Monitoring developments in standardisation in relation to sustainability.
- Promoting the Steel Construction Sustainability Charter as a route for the responsible sourcing of structural steelwork.
- Monitoring attitudes towards steelwork as a sustainable material against competing materials.
health and safety

Sharing experience and knowledge to ensure good working practices and reduce health and safety incidents

Health and Injury
The Accident Frequency Rate (AFR) rate for 2017 was 0.4 for BCSA Members based on the injuries reported under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

The drive to reduce injuries in the constructional steelwork industry has been a focus of BCSA’s Health and Safety Committee. This is achieved by identifying injury trends and then sharing members’ combined knowledge to develop good practice guidance.

Behavioural Based Safety Programmes
Many versions of Behavioural Based Safety programmes already exist with different degrees of success. These programmes will work temporarily because considerable time, effort and energy are put into rolling a programme out, including the safe systems of work, training and development of leaders.

In 2017 BCSA introduced its ‘Be Selfish Be Safe’ programme which has a simple message that can be adopted by the workforce and, as a result, should be self-driven. In this programme the workforce identifies the risk, and it then becomes the role of the supervisor to address that risk (with the support of managers where necessary). The workforce will then see that they have a direct influence over the safe application of their task, and that they have been made ‘masters of their own fortune’. If they continue working in the knowledge that they could have addressed a risk but did not bother, then the accident or incident is already in play and they are now relying on good fortune, rather than good management, to prevent injury or an incident. Hence the message is to ‘be selfish’ when it comes to your own health and safety.

Following the introduction of the ‘Be Selfish Be Safe’ programme, the industry accident record has shown positive signs of improvement. To support further improvement, the Health and Safety Committee will introduce regular health and safety themes that can be used in the workplace to ensure the programme is given a high profile and actively supported.

Health and Safety Forums
BCSA works with other trade associations to establish common areas of health and safety concern. The following forums are actively attended:

- Specialist Engineering Contractors Health and Safety Group (SEC)
- Engineering Construction Industry Association (ECIA)
- Metals Industry Forum Education and Training Working Group
- Small Business Trade Association Forum (SBTAF)
- Mobile Elevating Work Platforms (MEWPs) UK Safety Forum
- Royal Society for the Prevention of Accidents (RoSPA)
- Institution of Occupational Safety and Health (IOSH)
- Safety Schemes in Procurement (SSIP)
- Weld Fume Exposure Forum (HSE)
health and safety
Sharing experience and knowledge to ensure good working practices and reduce health and safety incidents

Safety Schemes in Procurement (SSIP)
BCSA is a registered member of the Safety Schemes in Procurement (SSIP), which is an umbrella organisation for prequalification schemes that offers mutual recognition. The benefit to Steelwork Contractor Members is that the health and safety assessment is recognised by all of the other SSIP registered organisations so, if a Member needs to register with another scheme that is also SSIP registered, the BCSA Membership Assessment Certificate (which includes the SSIP logo where applicable) can be used as evidence to show they have already met the health and safety core criteria.

To maintain its SSIP registered membership status BCSA is audited each year to ensure that its Members meet the minimum health and safety requirements known as the ‘core criteria’ for health and safety.

future projects
• Maintain a routine programme of themes for the ‘Be Selfish Be Safe’ programme.
• Develop a programme to review and update the health and safety publications.
• Review the industry accident data for trends to be addressed.

Nova Victoria development, London – ComFlor® 51+ composite floor decking, D100 RoofDek profile and Celsius® 355 structural hollow sections supplied by Tata Steel, fabrication by Severfield
Field Trials Station, Bawburgh – TSI Structures Ltd

NHS Hospital, Orkney – BHC Ltd

New HQ for Scania Trucks, Milton Keynes – Tata E60 floor deck, reinforcement and concrete supplied and installed by MSW UK Ltd

Imperial Park, Coventry – voestalpine Metsec Plc
training
Supporting a skilled and qualified workforce

CRAFT Apprenticeship Scheme

BCSA’s CRAFT scheme is an industry approved training programme developed by the industry offering demonstrable career opportunities to attract new entrants into the industry. It can be used by the employer to assist with the development of the trainee where no local training provider or facilities are available. CRAFT can also be used to establish internal practical training over a set timescale, and provides an industry standard of competence that can be achieved through workplace coaching and validation. The training modules meet the competency standards in the National Structural Steelwork Specification for Building Construction.

The five trades currently covered by the CRAFT training scheme are:

<table>
<thead>
<tr>
<th>CRAFT</th>
<th>Number of Modules</th>
<th>Duration</th>
<th>Meets Trailblazer Standard</th>
<th>End Point Assessment</th>
<th>Experienced Worker Assessment</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welder Fabricator</td>
<td>12</td>
<td>2 years</td>
<td>Yes</td>
<td>Submitted</td>
<td>Available</td>
<td>Now</td>
</tr>
<tr>
<td>Steel Erection</td>
<td>11</td>
<td>2 years</td>
<td>Yes</td>
<td>Submitted</td>
<td>Available</td>
<td>Now</td>
</tr>
<tr>
<td>Metal Decking Installer*</td>
<td>8</td>
<td>18 months</td>
<td>Under consideration</td>
<td>Under consideration</td>
<td>Available</td>
<td>Now</td>
</tr>
<tr>
<td>Structural Steel Detailer</td>
<td>10</td>
<td>2 years</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Now</td>
</tr>
<tr>
<td>Surface Treatment</td>
<td>7</td>
<td>18 months</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Now</td>
</tr>
</tbody>
</table>

*CSCS Blue Card
CRAFT Training and E-learning:
The tables below shows the numbers of trainees since the launch in June 2014:

<table>
<thead>
<tr>
<th>CRAFT Course</th>
<th>Number Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabricator Welder</td>
<td>56</td>
</tr>
<tr>
<td>Welder</td>
<td>6</td>
</tr>
<tr>
<td>Surface Treatment</td>
<td>6</td>
</tr>
<tr>
<td>Metal Decking (experienced worker - first cert. 17/06/16)</td>
<td>101</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>169</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E-Learning</th>
<th>Number Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolting</td>
<td>161</td>
</tr>
<tr>
<td>Building Information Modelling (BIM)</td>
<td>15</td>
</tr>
<tr>
<td>Welding</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>212</strong></td>
</tr>
</tbody>
</table>

Since the launch of CRAFT 169 trainees have been registered by BCSA member companies; of which 109 have completed and are employed in a permanent capacity with the company they trained with.

BCSA will continue to ensure that the scheme is focused on the principles of validation and raises standards in the constructional steelwork sector.

**Trailblazer Programme**
The Trailblazer Programme is a government initiative to develop training standards for apprenticeships. Trailblazer Standards form the backbone of the government’s new apprenticeship framework and must be written by employer groups.

BCSA employer groups developed the Structural Steelwork Fabricator Standard and the Structural Steelwork Erector Standard. The End Point Assessment Plans for the Standards are currently with the Institute for Apprenticeships for endorsement and allocation of the funding category.

**future projects**
- BCSA will continue to promote the industry specific training and encourage other trade associations to adopt the training.
- Any new CRAFT courses are likely to be focused on supervisory, management and in-house inspection/auditing roles within the industry as access to industry specific training material is limited.

• BCSA will continue to promote the industry specific training and encourage other trade associations to adopt the training.

• Any new CRAFT courses are likely to be focused on supervisory, management and in-house inspection/auditing roles within the industry as access to industry specific training material is limited.
Pedestrian bridge, Bromsgrove Station – Structural Fabrications Ltd

Fully-assembled module for use in the offsite building sector – BW Industries Ltd

Merthyr Valley Homes Offices, Merthyr Tydfil – Overdale Construction Services Ltd

Mathematical Science Building, University of Warwick – Coventry Construction Ltd
Celebrating and promoting the success of structural steelwork to ensure that it remains the material of choice

About Steel for Life
Steel for Life’s key objective is to promote the advantages of steel as a construction material, and the features that make steel the framing material of choice for a wide range of buildings, bridges and other structures. Steel for Life is governed by an independent Advisory Board, comprising BCSA members and headline sponsors.

Having completed its second full year of operation, Steel for Life is engaging with clients, architects, engineers, main contractors and cost consultants, providing them with knowledge, support and tools for specifying and designing in steel.

Steel for Life undertook significant marketing activities in 2017/18:

Structural Steel Design Awards
The presentation of the 2017 Awards, sponsored by BCSA and Steel for Life, took place on 4 October at the Museum of London.

The objective of the Structural Steel Design Awards (SSDA) is to recognise and celebrate the excellence of the UK and the Republic of Ireland in the field of steel construction, particularly demonstrating its potential in terms of sustainability, efficiency, cost-effectiveness, aesthetics and innovation.

Entries for the Awards continue to demonstrate increasingly high standards, not only in design and fabrication, but also in speed, quality, health and safety, and environmental awareness.

The independent judging panel visits each of the shortlisted entries to ensure that the project lives up to the promise shown by the entry on paper.

The Awards have made a significant contribution to the high market share of steel-framed construction.

New Steel Construction Magazine
New Steel Construction (NSC) continued to be published in association with the SCI in both print and digital formats with 10 issues per year, supported by a Weekly News service.

Email alerts for each issue are now sent to over 7,000 named specifiers from across the construction supply chain, and the print format circulation reaches over 6,000. The magazine is also available directly on www.newsteelconstruction.com

January 2018 saw the publication of the NSC Annual Review. This 36-page publication reflected on key projects featured in 2017, highlighting the benefits of steel construction and showcasing the technical output of the steel sector through the year. 25,000 copies were distributed with Construction News, Building magazine and the Architects Journal.

January 2018 also saw the publication of the NSC Technical Digest, which brings together all the Advisory Desk Notes and Technical Articles from the steel construction sector published in NSC magazine throughout 2017. Available in PDF form, this was widely promoted via NSC, BCSA and SCI.
Celebrating and promoting the success of structural steelwork to ensure that it remains the material of choice

Construction Press

A number of regular steel construction features are now well-established with the leading construction press. These aim to highlight the benefits of structural steel to the specifier target audience. In 2017/18 a series of design guides on key topics was continued.

A library of these features and guides can be found at www.steelconstruction.info/Steel_construction_news

- **Steel Spotlight** - a 10-page feature in Construction News, which has an 8,000 circulation and is particularly popular with contractors.
- **Costing Steelwork** - a quarterly feature in Building magazine, written by AECOM, to assist quantity surveyors with up-to-date information and guidance on the realistic pricing of structural steelwork. It also presents a series of cost comparisons covering five building types. This had a 15,000 circulation and 60,000 total distribution.
- **Building Magazine CPD Modules** - a series of written CPD modules which contain a full technical article followed by a multiple-choice questionnaire. The series covers sustainable steel buildings; steel and fire protection; costing structural steelwork and steel and offsite-construction. Over 4,500 building professionals have completed the CPD articles since their launch in 2017.
- **Structural Steelwork in Action** - a 10-page biannual supplement in New Civil Engineer that has a 42,000 circulation and a total 84,000 distribution.
- **Steel Intelligence** – a 10-page supplement in RIBA Journal that has a 27,000 circulation.
- **Steel Construction: Cost** - a 28-page supplement giving an overview of how to price structural steelwork, the key factors to be considered and providing a review of the cost competitiveness of structural steelwork for five building types.
- **SSDA commemorative brochure** – this reviewed the projects that received Awards, Commendations and Merits.

Steel Network

A series of targeted e-newsletters to architects, structural engineers and cost consultants was launched in 2017. The first issue was sent to building professionals via Building magazine, Architecture Today and the Institution of Structural Engineers; a combined distribution of 55,000. Newsletters will be distributed to design and building professionals three times per annum.

Social Media

Social media, including Twitter, Facebook, LinkedIn, Google+ and our own YouTube channel, have been used to engage with specifiers to further promote www.steelconstruction.info and key issues.

Future Projects

- October 2018 will see the 50th Structural Steel Design Awards, jointly sponsored by BCSA and Trimble Solutions (UK) Ltd. To mark the occasion, BCSA has gathered together details of all the previous Award-winning projects and presented them on www.steelconstruction.info
Headline sponsors:

Gold sponsors:
AJN Steelstock Ltd | Ficep UK Ltd | Kingspan Limited
National Tube Stockholders and Cleveland Steel & Tubes
Peddinghaus Corporation | voestalpine Metsec Plc | Wedge Group Galvanizing

Silver sponsors:
Hadley Group | Jack Tighe Ltd | Tata Steel | Trimble Solutions (UK) Ltd

Bronze sponsors:
Barnshaw Section Benders Ltd | Hempel | Joseph Ash Galvanizing
Jotun Paints | Kaltenbach Limited | Kloeckner Metals UK
Sherwin-Williams | Tension Control Bolts Ltd | Voortman Steel Machinery

As of June 2018
Demonstrating competence and registering capability, resulting in improved service and client confidence

**Membership Services**
The Association is a focal point at local, national and international level for the steel construction industry, acting as its representative body and central management services organisation. On behalf of its members, BCSA:

- Promotes the interests of the industry and the use of steel in construction.
- Provides members with professional advice.
- Provides members with opportunities to meet and discuss matters of common interest.
- Promotes the capabilities and expertise of the industry to specifiers.
- Helps specifiers and clients achieve cost-effective solutions through technical excellence.
- Provides skills training.
- Publishes technical publications.
- Represents members’ interests to government, local government, public bodies and professional institutions.

BCSA members have access to a wide range of services and benefits, both professional and economic, which are focused on helping the company, including a professional Head Office advisory service on a variety of topics. A comprehensive briefing and information package is issued to members electronically on an almost daily basis to keep them fully informed on current matters.

There are three categories of membership:

**Steelwork Contractor Members** are companies which undertake the design, fabrication and erection of all forms of construction in building and civil engineering.

**Industry Members** are those principal companies involved in the direct supply to all or some Members of components, materials or products.

**Corporate Members** are clients, professional offices, educational establishments etc which support the development of the national specifications, health and safety, quality, fabrication and erection techniques, overall industry efficiency and good practice.

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**Selecting a Steelwork Contractor**
To select a steelwork contractor for tender lists there is no easier way of prequalifying companies than using the BCSA Membership Directories for Buildings and Bridgeworks, which can be found on www.steelconstruction.org/directories

The Directories should be used to select a steelwork contractor who has the special skills to suit your project. BCSA’s experienced professional assessors visit all companies to assess their capabilities in 14 Categories of building steelwork and 10 Subcategories of bridge construction.
The Categories give guidance on what type of steelwork the company is competent to undertake, which relates to the company’s work facilities, its track record and its technical and management experience. Each applicant is independently assessed during a visit by reference to a range of competence criteria including technical and managerial. Companies can attain just one category, for one type of steelwork, or two or more.

The Directories also classify companies by suggesting a maximum contract value that they should handle. The Class gives guidance on the size of steelwork contract which the company has the financial and management resources to undertake.

There are c100 steelwork contractor member companies of the BCSA, and this provides users with plenty of choice to ensure a competitive tender list. Membership of BCSA is open to any steelwork contractor who has a fabrication facility within the United Kingdom or the Republic of Ireland.

See www.steelconstruction.org/directories/buildings.html

<table>
<thead>
<tr>
<th>Buildings Categories:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Heavy industrial platework for plant structures, bunkers, hoppers, silos etc</td>
</tr>
<tr>
<td>D High rise buildings (offices etc over 15 storeys)</td>
</tr>
<tr>
<td>E Large span portals (over 30m)</td>
</tr>
<tr>
<td>F Medium/small span portals (up to 30m) and low rise buildings (up to 4 storeys)</td>
</tr>
<tr>
<td>G Medium rise buildings (from 5 to 15 storeys)</td>
</tr>
<tr>
<td>H Large span trusswork (over 20m)</td>
</tr>
<tr>
<td>J Tubular steelwork where tubular construction forms a major part of the structure</td>
</tr>
<tr>
<td>K Towers and masts</td>
</tr>
<tr>
<td>L Architectural steelwork for staircases, balconies, canopies etc</td>
</tr>
<tr>
<td>M Frames for machinery, supports for plant and conveyors</td>
</tr>
<tr>
<td>N Large grandstands and stadia (over 5000 persons)</td>
</tr>
<tr>
<td>Q Specialist fabrication services (eg bending, cellular/castellated beams, plate girders)</td>
</tr>
<tr>
<td>R Refurbishment</td>
</tr>
<tr>
<td>S Lighter fabrications including fire escapes, ladders and catwalks</td>
</tr>
</tbody>
</table>
Demonstrating competence and registering capability, resulting in improved service and client confidence

**Selecting a Product Supplier**

Industry Members are those principal companies involved in the direct supply to all or some Members of components, materials or products. Sub-categories of industry membership are as follows:

- Computer software
- Design services
- Manufacturing equipment
- Protective systems
- Safety systems
- Steel producers
- Steel stockholders
- Structural components
- Structural fasteners

Details of company in each sub-category can be found at: www.steelconstruction.org/directories/products-and-services.html
Link road bridge, Lancaster – over 20,000 weathering steel TCBs were installed by Cleveland Bridge
RQSC bridgeworks

Demonstrating competence and registering capability, resulting in improved service and client confidence

The Register of Qualified Steelwork Contractors Scheme for Bridgeworks (RQSC) is open to any Steelwork Contractor who has a fabrication facility within the European Union.

In order to be registered for Bridgeworks, a company must present references for completed supply and erect contracts that include at least three bridgework contracts (or contracts of similar complexity), of which two must each exceed £100,000 contract value completed within the last three years.

The company must have manufactured in-house at least 75% of the steelwork for each of the three contracts. The contracts must have required materials and workmanship to recognised bridgework Standards. At least one of the contracts must generally have required thick plate welding such as the butt welding of S355J2 plate in a thickness of at least 40mm.

The company’s track record and the company’s systems, existing facilities and employed personnel will be used to establish its capability.

Companies can attain just one category, for one type of bridge steelwork, or two or more.

**Bridgeworks Categories:**

- **FB** Footbridges
- **CF** Complex footbridges
- **SG** Sign gantries
- **PG** Bridges made principally from plate girders
- **TW** Bridges made principally from trusswork
- **BA** Bridges with stiffened complex platework (eg in decks, box girders or arch boxes)
- **CM** Cable-supported bridges (eg cable-stayed or suspension) and other major structures (eg 100 metre span)
- **MB** Moving bridges
- **RF** Bridge refurbishment
- **AS** Ancillary structures in steel associated with bridges, footbridges or sign gantries (eg grillages, purpose-made temporary works)

Highways England Company Ltd, Transport Scotland and Northern Ireland’s Department for Regional Development require that companies seeking to tender for contracts involving the fabrication and erection of bridgeworks should be listed on the Register of Qualified Steelwork Contractors for the type and value of work to be undertaken.

See [www.steelconstruction.org/directories/bridges.html](http://www.steelconstruction.org/directories/bridges.html)
steel construction certification scheme

Ensuring commitment to quality, environmental and occupational health & safety

Certification Services

Demand for SCCS certification services continues to grow. All Quality Management (QMS), Environmental Management (EMS) and Occupational Health & Safety Management (OHSMS) certification re-assessments and surveillance visits scheduled for 2017/18 were successfully completed.

In addition, initial and ongoing assessments for new QMS, EMS, OHSMS, Factory Production Control (FPC) and National Highways Sector Schemes (NHSS) clients were completed during the year.

During 2017/18 SCCS continued to work alongside Highways England on issues related to NHSS 3, NHSS 3B, 19A and 20 standards. SCCS continues to be recognised as the lead Certification Body for National Highways Sector Schemes 3, 3B, 19A and 20.


SCCS actively attends meetings of the UK and European Sector Group 17 of Notified Bodies, the NHSS Sector Schemes 3, 3B, 19A and 20, the NHSS Liaison Group and the NHSS Certification Body Group.

UKAS Accreditation


In Q1 2018 SCCS received UKAS accreditation as a certification body for Welding Quality Management System (WQMS) BS EN ISO 3834:2005 and became the first Certification Body to offer NHSS 3B certification. The addition of these two accreditations was part of SCCS’s long-term strategy of offering a single source for all accreditations relevant to the industry.

Quality Management (QMS) BS EN ISO 9001:2008 and BS EN ISO 9001:2015

In 2017/18 SCCS serviced the certification of 174 separate quality management systems, each of which is visited at least once per year. As at 31 March 2018 there were 12 new clients pending QMS certification.

The need for structural steelwork contracting organisations to address the requirements for CE Marking (BS EN 1090-1), and Factory Production Control (FPC), continues to attract additional interest in the development of formal quality management systems.

Environmental Management (EMS) BS EN ISO 14001:2004 and BS EN ISO 14001:2015

SCCS serviced the certification of 43 separate environmental management systems in 2017/18. As at 31 March 2018 there was 1 separate client pending EMS certification.
steel construction certification scheme

Ensuring commitment to quality, environmental and occupational health & safety

Health & Safety (OHSMS) BS OHSAS 18001:2007
In 2017/18, SCCS serviced the certification of 37 separate health and safety management systems. As at 31 March 2018 there were 5 separate clients pending OHSMS certification.

Due to the changes to SSIP mutual recognition of BS OHSAS 18001:2007 certificates, SCCS was accepted as a SSIP Certification Body towards the end of Q1 2018.

Welding Quality Management Systems (WQMS)
BS EN ISO 3834:2005
As at 31 March 2018 there were 3 clients going through the initial certification process.

CE Marking – ‘structural steel and associated products’ (FPC)
BS EN 1090-1:2009+A1:2011
In 2017/18, SCCS serviced the certification of 527 Factory Production Control systems. As at 31 March 2018 there were 13 separate clients pending FPC certification. SCCS also continued to perform FPC gap analyses during 2017/18.

NHSS 19A – ‘corrosion protection of ferrous materials by industrial coatings’
In 2017/18, SCCS serviced the certification of 8 separate corrosion protection management systems in accordance with NHSS 19A.

NHSS 20 – ‘the execution of steelwork in transportation infrastructure assets’
In 2017/18, SCCS serviced the certification of 29 management system for this sector scheme. As at 31 March 2018 there were 2 clients pending NHSS 20 certification.

NHSS 3 – ‘stocking and distribution activities for mechanical fasteners’
In 2017/18, SCCS serviced the certification of one management system for this sector scheme

NHSS 3B – ‘stocking and distribution activities for structural steel products’
In Q1 2018, SCCS received UKAS accreditation as a Certification Body for NHSS 3B. As at 31 March 2018 there was one client certified to NHSS 3B and 6 clients pending certification.

CE Marking – ‘preloaded and non-preloaded bolting assemblies’ (FPC Bolting) BS EN 14399-1:2015 and BS EN 15048-1:2007
In 2017/18, SCCS serviced the certification of 3 Factory Production Control systems for ‘preloaded and non-preloaded bolting assemblies’ (FPC for Bolting).

future projects
• An application was made to UKAS towards the end of Q1 2018 for SCCS to transition from BS OHSAS 18001:2007 to the revised Occupational Health & Safety standard BS EN ISO 45001:2018.
consumption of constructional steelwork

Steel's Share of the UK Multi-Storey Non-Residential Market

% Based on Floor Area

- Steel
- Insitu Concrete
- Load Bearing Masonry
- Timber
- Precast Concrete
Refurbishment of iconic Finnieston Crane, Glasgow – Cairnhill Structures Ltd

Anti-vandalism pipes, Queensferry Crossing – Had Fab Ltd
consumption of constructional steelwork

UK Consumption of Constructional Steelwork

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Figures in thousand tonnes
Figures supplied by BCSA and Steel for Life