



Message from the WMF Chairman

“Who is the Wood Marketing Federation’s audience?” is a question we’re occasionally asked in the Federation, usually when we are proposing a new project or making a request for support. It’s a reasonable question which I try and answer by dividing the audience into internal and external publics.

Our internal audience comprises WMF members while our external audience includes people and organisations who support our mission to promote wood as a renewable, sustainable and versatile natural material. This consists of timber specifiers especially architects, engineers, designers, and builders along with State agencies and educational bodies.

Most of our projects are aimed at a specific target audience such as our Third Level Student Wood Awards. These awards are aimed at architects, designers, engineers and wood workers of the future. When we began planning these awards over 12 years ago, we were conscious that education in wood and wood related topics in our universities and institutes of technology was extremely weak. The target audience and objectives were specific: promote wood to our third level college students but first to college lecturers and heads of relevant faculties, so that we would eventually reach the students in our classrooms.

The national conference on wood mobilisation which we held in Enfield was aimed at a different audience. This included our own membership and the State sector but the conference also demonstrated the interdependency of forestry and forest products sector as we reached out to an audience that includes forest owners, timber harvesting contractors, foresters and farmers. We were able to do this effectively through our own membership and collaboration with conference co-organisers, the Society of Irish Foresters.

The truth is that our audience continues to expand as more and more people realise the value of wood as a key construction and design material. We can only reach our key publics if we have the support of our internal audience – our membership. The membership base needs to expand to include, timber traders, all – not some – key wood processors and eventually wood manufacturers and other relevant stakeholders.

In November 11, we will hold the second Wood Awards Ireland in collaboration with the RIAI where the best of wood design and construction will be on display. The is an evening for all our audiences to meet and discuss ways to promote and increase awareness of wood as a sustainable 21st century building and design medium. We look forward to meeting you all.

Paul Harvey
Chairperson
Wood Marketing Federation

Federation conference explores threats and opportunities to wood mobilisation in Ireland

The National Forestry Conference “Wood Mobilisation in Ireland” held on June 1, explored wood mobilisation from the perspectives of the Forest Service, growers, timber processors, foresters, producer groups and other key stakeholders.

Organised by the Wood Marketing Federation in partnership with the Society of Irish Foresters, it concentrated on national issues but the international dimension surfaced repeatedly as the audience was reminded that we now export most of our sawn timber and virtually all of our panel board products.

This was outlined by Richard Lowe, Coillte. “The UK is Ireland’s greatest market but it is also the biggest importer of wood products in Europe with an annual consumption of approximately 9m cubic metres,” he said. While Ireland has 6% of the UK market share – same as Russia and greater than France, Germany and Spain – this is a fiercely competitive environment. Ireland competes

successfully against the dominant producers Sweden, Latvia and Finland who command 75% of the market share.

Andrew Doyle, Minister of State with responsibility for forestry, set the tone for the conference when he outlined the importance of a viable afforestation programme to supply the Irish sawmilling and timber processing industry but emphasised the need to optimise the existing forest resource. “We must also maximise the volume of raw material that is harvested from our forests, not just roundwood for our processors, but also the less traditional assortments for our growing renewable energy sector,” he said.

While price is a major factor for timber growers and processors, continuity of supply is probably just as important. Alex Kelly, Irish Wood Producers (IWP) outlined the importance of providing a continuous supply of wood chips for her customers. These include Danone in Wexford, which uses wood as a major renewable energy source.

continued on page 2



At the National Forestry Conference in Enfield: Back row (l-r): Dr Niall Farrelly, president of the Society of Irish Foresters; Noel Kenna, managing director, Roundwood Timber Ltd; Paul Harvey, chair Wood Marketing Federation (WMF); Daragh Little, chair Irish Forestry and Forest Products Association; Richard Lowe, director, sales and marketing, Coillte; Dr Eugene Hendrick, senior inspector COFORD, Dept of Ag, Food and Marine; Brendan Lacey, chairman, Irish Timber Growers Association; Donal Magner, secretary WMF; John Ryan, forestry manager, Murray Timber Group. Front row (l-r): Alex Kelly, manager Irish Wood Producers; Justin McCarthy, editor and chief executive Irish Farmers Journal; Minister of State for Forestry Andrew Doyle; Fergal Leamy, chief executive Coillte; Dr. Aine Ni Dhubhain, forestry department UCD.

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continued from page 1

Purchasers of timber products in Ireland and overseas need continuity of supply from timber processors, which is only possible if processors themselves can source a continuous supply of logs.

Coillte along with its sawmill customers acknowledge the principle of continuity of supply, which is why both parties agreed on a timber sales system last year based on annual contracts.

“This new system gives our sawmill customers more surety around supply and log prices that move with the end market, while maintaining the flexibility to purchase additional material through our auction system,” maintained Richard Lowe.

“This change has brought increased stability to our sawmill customers giving them confidence to make necessary investments to upgrade their facilities and allow the sawmill to spend more management time to focus further down the supply chain.”

Continuity was also stressed by Noel Kenna who provided the contractor’s perspective at the conference. “Continuity of well planned work is essential for contractors who are the most important link in the timber supply chain from landowner to the end user,” the MD of Roundwood Timber Contractors told the conference. “The contractor and machine operators are responsible for quality logging and environmental issues,” he said. “We are today’s harvesting process instructors and managers.”

Roading and felling licence approval are still major issues for wood mobilisation according to Daragh Little, chairman Irish

Forestry and Forest Products Association and MD Forestry, Veon Ltd. He said felling licence and roading schemes were too bureaucratic and time consuming with too many hurdles along the way including public consultation, budgeting, environmental restrictions and planning barriers.

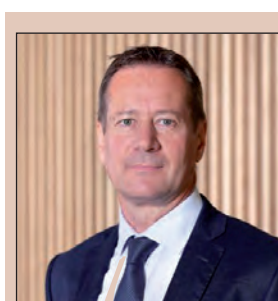
He acknowledged that the forest road scheme had been amended to make it simpler and while a planning permission solution has been found “it needed implementation”.

He recommended a Programme Manager for wood mobility whose responsibilities would include “drawing the various forestry sector players together and focusing on efficiencies within the sector”.

John Ryan, forestry manager with the Murray Timber Group stressed the need to create a marketing and production climate to make it easier to do business. He said felling licences should be speeded up as often “markets can change while growers are waiting for approval and the opportunity for a profitable sale may be lost”.

Brendan Lacey, CEO, Irish Forestry Unit Trust – IForUT – and chairman, ITGA outlined a number of ITGA initiatives such as the Wood Price Quarterly which can be further developed into a comprehensive collective timber sales system. He also recommended that the Forest Service implement the findings of the recent COFORD report “in particular those related to facilitating voluntary forest certification.”

“There is likely to be a potential shortfall in



Stuart Goodall, chief executive Confor explored actions taken to increase wood supply in Scotland at the national conference

supply of approximately two million cubic metres on the island by 2020, half in sawlog and half in energy wood.” maintained Dr. Eugene Hendrick, chief inspector, Forest Service.

Stuart Goodall, CEO of Confor – the organisation representing the UK forestry and forestry products industry – recommended greater recovery of wood biomass especially for the burgeoning wood energy market. “This will require new equipment to increase the width between brash mats, and to allow the recovery of brash either by brash baling, or lifting it loose and roadside chipping,” he said.

“Prices for timber have increased strongly in Scotland, and this has helped to bring more timber to market, but there are also issues of access, management decisions, financial viability, ownership priorities, public policy that favours non-economic activity, and many others, that provide a real challenge to bringing more timber to market.”

Dr. Hendrick summed up the challenge to the industry which he said “is to achieve and potentially exceed forecasted levels of roundwood production in a sustainable manner”.

Federation establishes the Irish Timber Information Centre in collaboration with NUI Galway

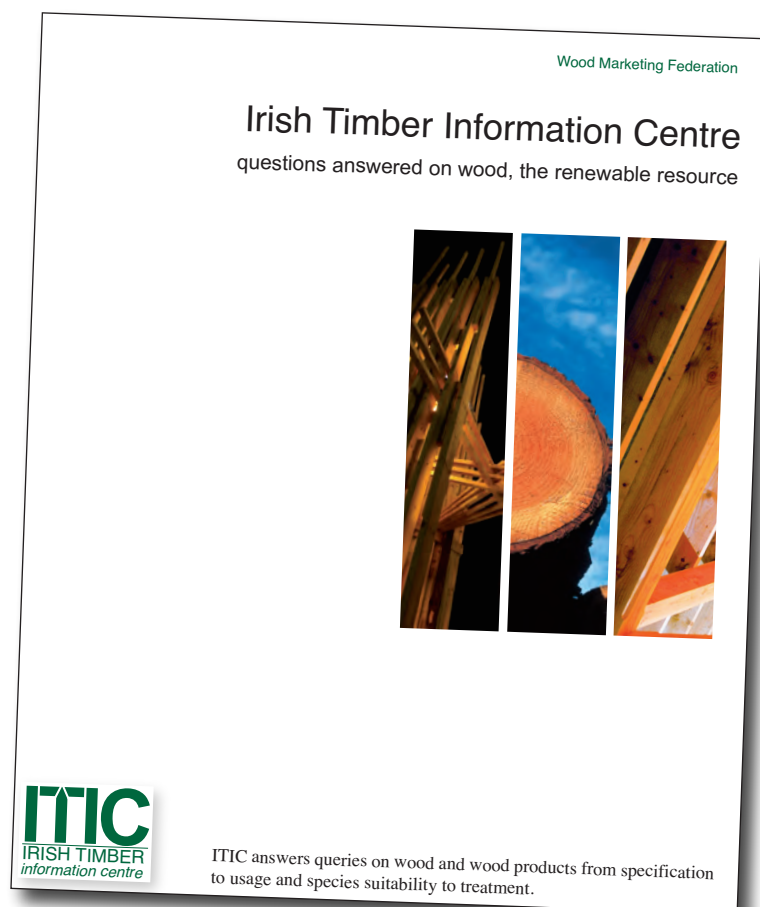
The main objective of this initiative is to provide information on a wide range of timber issues relevant to stakeholders working in wood including architects, engineers, designers, builders, timber preservation specialists, third level colleges, wood workers and other specifiers. The Irish Timber Information Centre (ITIC) also prepares literature on timber design, construction, usage and preservation.

WMF believes that ITIC can play a key part in advancing the spread of knowledge on a wide range of wood related topics. It is compatible with most of our other projects which have a strong promotional and educational content because we recognise that there is still a lack of information relating to wood usage and design, specific to Ireland. In this regard it will play a major role in achieving our mission to promote wood as a renewable, sustainable and versatile natural material.

ITIC is supported by the WMF, COFORD, NUIG and stakeholders in the forestry and forest products sector as it meets the following Federation objectives:

- Quality - supporting the development of the highest standards.
- Education - increasing the knowledge and understanding of wood and wood products.
- Innovation - promoting and encouraging new uses and applications for wood.

The ITIC project is compatible with the WMF mission to promote wood as a renewable, sustainable and versatile natural material.



ITIC provides:

- Information to timber specifiers in architecture, engineering, design, processing, preservation and building as well as third level students and researchers.
- The Irish timber industry with a single point of contact for technical and regulatory information.
- Website information to reflect queries directed at ITIC.
- Information on aspects of wood such as the compilation of literature on wood testing centres in Ireland and the UK, wood processing, engineered wood and certification.

Queries should be forwarded to info@iticwood.ie or click on the ITIC icon on www.wood.ie and complete the form. These will be answered as

soon as possible after consultation in-house or with experts in Wood Technology Ireland (WTI).

ITIC draws on wide sources of information including NUIG, and WMF but especially from WTI which provides the Irish timber construction industry, specifiers and relevant stakeholders with technical advice and information to facilitate compliance with standard specifications, the Construction Products Regulation (CPR) and also with the requirements of the Irish building regulations (see page 6).

Queries relating to the WMF and COFORD manual, *Woodspec - A Guide to Designing, Detailing and Specifying Timber in Ireland* should be completed on the form available on <http://www.woodspec.ie/adviceandenquiries/>.

Motorway fencing review - IS435



Motorway timber fencing is still an important market for Irish sawmills, treatment providers and ultimately growers even though new road construction has reduced considerably over the past decade. The main challenge is still to capture as much of this market as possible for timber fencing so proper timber treatment is a key to ensuring a recognised accepted standards.

The standard known as IS435 has been in use for roadside timber for a number of years. It ensures that all stakes are properly treated and the standard also guarantees traceability to the producer. The National Roads Authority (NRA) accepts this standard and

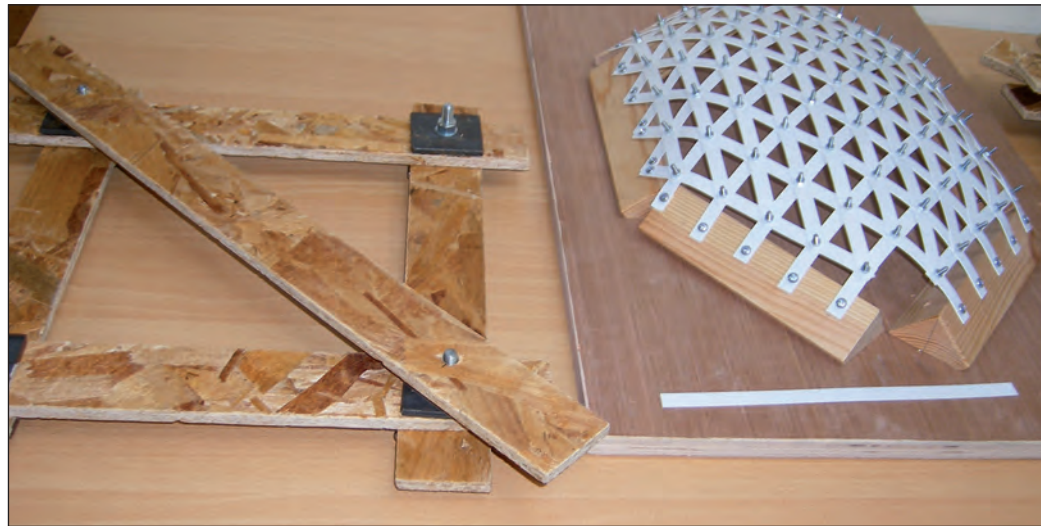
timber roadside fencing and acoustic barriers are now familiar sights on Irish motorways.

The standard is currently being updated by the consultative committee and Paul Harvey, chairman WMF is the Federation's representative in the review of IS435. "It's important that best practice is reflected in the standard to ensure timber continues to be specified for this very important market," he said. "If members wish to make comments or proposals on the review, please email info@wood.ie." WMF also hopes to update the revised standards as part of its *Talking Timber* information notes when the review is complete.

Limerick, Dublin and Galway students scoop top awards

If a trend has been emerging in the Third Level Student Wood Awards over the past 11 years, it's in the increased use of engineered wood products. This reflects global trends as innovative architects, engineers, wood scientists and designers are attracted to structural engineered wood products because they offer design versatility as well as the potential to specify timber for large-scale projects including bridges and multi-storey buildings.

Minister of State with responsibility for forestry Andrew Doyle presented awards in the following categories during the annual prize-giving event held in the National Botanic Gardens, Dublin July 7:



Gridshell model by Matt Collins, University of Limerick winner of the engineering award. Matt explored the gridshell concept to produce large load-bearing spans using oriented strand board (OSB).

- Engineering
- Architecture
- Craft/fabrication
- Design

Once again, the awards were supported by Coillte – the main sponsors – as well as COFORD, Department of Agriculture, Food and the Marine and the Society of Irish Foresters. “I consider this competition to be particularly significant in that it not only promotes the use of wood in the various types of applications but fosters creativity in our students and also opens our eyes to the potential of timber,” said Minister Doyle.

ENGINEERING

Matt Collins, winner of the engineering award, developed a project using gridshells in construction. Reconstituted wood in the form of OSB is an ideal material for gridshells. These are three-dimensional structures which derive their strength from double curvatures. “Like shells, they can achieve large span to thickness ratios,” explained Matt, a University of Limerick student. “However, requirements including low stiffness, high strength and few defects, can result in high selection and processing costs when using solid timber,” he said.

He believes that engineered timber may be a viable alternative that avoids these costs and convinced the judges of the suitability of OSB for bending-active gridshells. As part of his project, he developed “a computational model to predict stress and load-deformation behaviour of OSB using single and double layer gridshells.”

ARCHITECTURE

Niamh Denny, Dublin Institute of Technology won the architecture award for her project “Timber Systems Through Circumstance.” She focused on the economy and evolution of timber framing systems. Niamh explored “how a simple timber structure would react and adapt to a building typology which requires private, semi-private and public spaces to be coherent throughout”.

The project can be adapted to a large-scale public building. “The typology chosen explores a public health centre connected to a private respite centre, using standard ‘off the shelf’ timber and work within its restrictions and limitations,” she said.



Minister of State with responsibility for forestry Andrew Doyle (second from the right) presented the Wood Marketing Federation (WMF) Third Level Student Wood Awards in the National Botanic Gardens with (from left) Duncan Stewart, architect, TV presenter and member of WMF judging panel, Paul Harvey, WMF chair, Matt Collins, University of Limerick, winner of the engineering award and Gerard Murphy, managing director, Coillte Forest, the main sponsors of the annual awards.

CRAFT/FABRICATION

This is a wide ranging category but essentially rewards students who explore wood design ranging from traditional crafts to new and exciting uses whether working in sawn, recycled or engineered wood.

The outright award went to Brendan Mc Garry, Letterfrack College, Co. Galway for his project “Ch.53”. He worked to a brief that “challenged students to design and manufacture an innovative chair from wood with commercial potential for mass production”.

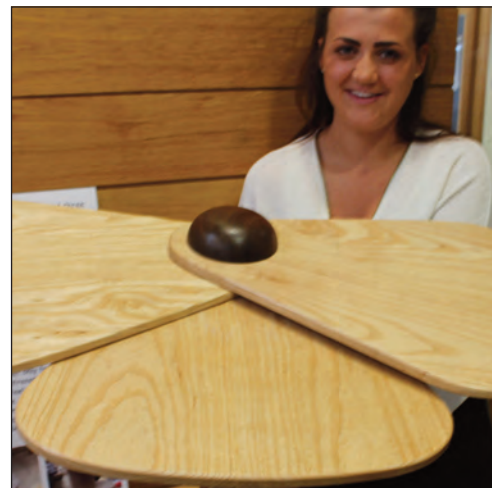
Through a series of tests and critical analysis, the chair was designed for adaptability to various environments and impressed the judges as it had market appeal and could be mass-produced.

Two commendations were made in the craft/fabrication award to Rob Ó Foghlú, Colaiste Stiofáin Naofa in Cork for “Binse” and Shane McEvoy, Dublin Institute of Technology for “The Bureau”.

Binse is a contemporary study table, intended for light and occasional use in the modern work or living space. Inspired by traditional Japanese joinery, Rob explored both traditional and contemporary design, using high-pressure laminates with a solid wood walnut frame. Shane McEvoy designed and manufactured a writing bureau



Rob Ó Foghlú explains “Binse” to judges Guillaume Coste, Coillte Panel Products and Simon O’Driscoll, O’Driscoll Furniture. Rob explored both traditional and contemporary design, using high-pressure laminates with a solid wood walnut frame.



Elysia Taylor, Bray Institute of Further Education received a design commendation at the Third Level Student Wood Awards for Leaf Table. Elysia used three timber species in her project; ash for the table top, walnut provided the central “dome” and beech for the legs and base.



Models by Niamh Denny, Dublin Institute of Technology winner of the architecture award



“Rove” by Andrew Collins. Design took its inspiration from traditional boat building.

based on traditional wood working, which meant that he had to learn a number of crafts such as veneering, marquetry and turnery.

DESIGN

The judges provided two commendations in the design category. Andrew Collins, Dun Laoghaire Institute of Further Education was praised for his project “Rove” an innovative chair made from native Irish oak. Andrew steam bent and fastened oak strips together using copper rivets. “The construction method was developed for the purposes of boatbuilding, so used the minimal amount of material to retain lightness whilst also exhibiting the strength necessary to battle the elements,” he said. The material was recycled from timber offcuts in the workshop.

The second design commendation went to Elysia Taylor, Bray Institute of Further Education for her project “Leaf Table”. The trifoliate design of the table tops references the shamrock symbol. Elysia used three

timber species in her project. Ash was used in the table tops which was biscuit jointed. Walnut provided the central “dome” axis while beech was used in the legs and base.

The adjudication panel comprised Simon O’Driscoll, O’Driscoll Furniture, Guillaume Coste, Coillte Panel Products and John Winslow, Donnelly Turpin Architects. “These brought a wealth of experience to the awards which the students could relate to as all three are top professionals in their disciplines of architecture, engineering and design,” said Paul Harvey, chairman of the Wood Marketing Federation, the organisers of the event.



Minister of State with responsibility for forestry Andrew Doyle presents Niamh Denny, Dublin Institute of Technology with the outright winner award of the architecture category.

We welcome news and views on this newsletter. Please contact Donal Magner, Secretary, Wood Marketing Federation, 1 Heatherbrook, Marlton Road Wicklow; email wood.ie or tel + 353 404 61111 / + 353 86 260 7883. See also www.wood.ie.

WOOD AWARDS IRELAND 2016 UNDERWAY



Sculptor Michael Warren discusses his plans to design main award and category winner sculptures for the Wood Awards Ireland with Donal Magner, secretary WMF.

The Wood Marketing Federation reports that 41 entries were received for Wood Awards Ireland (WAI). This is the second competition which promotes wood usage to designers, architects, engineers, craftspeople and other specifiers. WAI is compatible with the aims and objectives of the sponsors and with the Federation's mission to promote wood as a renewable, sustainable and versatile natural material.

WAI rewards Irish architects, engineers, designers and wood workers for creating work in Ireland and overseas. Projects that incorporate wood as an inherent medium are considered for the awards providing timber has been sourced from sustainably managed forests. The international dimension of the project is important, as WAI is also open to Irish practitioners based overseas who complete projects for Irish and international markets.

Invitations have been issued to Irish architects, engineers, designer and others working in wood to make submissions to WAI in following categories:

1. Large-scale buildings
2. Small-scale residential buildings
3. Restoration and conservation
4. Structural – timber bridges,

- boardwalks, shelters, decking, etc.)
 5. Furniture – bespoke and production
 6. Innovation and other including three subcategories: 'Wood Local', 'Wood Innovate' and 'Woodwork'
 7. New entrants, aimed at start up businesses or enterprises.
 8. International wood award under categories 1-8 supported by Enterprise Ireland.
- The WMF acknowledges generous funding and sponsorship from:

- COFORD – National Council for Forest Research & Development, Department of Agriculture, Food and the Marine
- AHEC – American Hardwood Export Council (AHEC)
- Coillte
- Enterprise Ireland

Relevant dates:

- Compilation of shortlist including project inspections September 2016.
- Awards ceremony November 11 – Dublin

venue – details to be announced.

WAI is supported by the Royal Institute of Architects of Ireland (RIAI) and the Society of Irish Foresters. Check the WMF website (www.wood.ie).

Michael Warren has accepted a commission to create sculptures in wood for the winners of the 2016 Wood Awards Ireland.

Acknowledged as Ireland's foremost sculptor, he is making the sculptures for the overall award and winners of architectural, engineering, design, furniture, restoration and other category projects.

Warren has had a number of major national and international exhibitions featuring wood as the main material including Unbroken Line in the Centre for Contemporary Art, Carlow (2010); One Foot in the Real World in the Irish Museum of Modern Art, Dublin (2013); and Predella, Galerie Weiller, Paris.

**Wood Awards
IRELAND 2016**

WAI is organised by the Wood Marketing Federation and supported by the Royal Institute of the Architects of Ireland.

WAI receives funding from COFORD (the National Council for Forest Research and Development), Department of Agriculture, Food and the Marine, Enterprise Ireland, AHEC (American Hardwood Export Council), Enterprise Ireland, Coillte and WMF.



Brexit and the Irish forestry and forest products sector



The implications of Brexit for the Irish forestry and forest products industry are serious as timber processors rely heavily on UK exports. Britain is the biggest importer of wood products in Europe, with an annual consumption of approximately nine million cubic metres (m³).

Ireland exports 1.38 million m³ of timber and timber products annually comprising 0.72 million m³ of sawn timber and 0.62 million m³ wood-based panels with a value of €320 million. The UK is the main outlet for virtually all of Ireland's exported sawn products and a significant proportion of panel board products. While panel board processors such as Masonite and Coillte Panel Products have an opportunity to continue to explore markets outside the UK, sawmills are likely to rely almost exclusively on our nearest neighbour.

Within two decades, total timber production will reach 7.5 million m³ more than double the forecasted output for this year. In this market situation, total exports would need to increase to between three and four million m³ realising a value of €700 million. Based on past trends, most of this product will end up in the UK.

Currency volatility along with possible future trade barriers will not only affect prices of timber and timber products but also log prices which have been high in Ireland for a number of years even in comparison with countries such as Sweden, where timber is produced over much longer rotations and as a result is graded to the higher C24 grade.

Given the closeness to the UK market and our dependency on it, any trade deal that differs from the current arrangement would acutely affect the Irish forestry and forest products industry.

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However, there are positives. The UK is likely to remain hugely dependent on timber imports and Irish processors have shown in the past that they can adapt to a fluctuating currency environments. Timber processors have also demonstrated that they have the capability to adapt to market downturns, especially since the construction crash in

Wood Technology Ireland

The Wood Marketing Federation welcomed the establishment of Wood Technology Ireland and will be referring technical queries on wood and wood products to this organisation and its experts through the Irish Timber Information Centre (ITIC).

WTI has been established to provide the Irish timber and construction industry with technical advice and information to facilitate compliance with standard specifications, the construction products regulation (CPR) and also with the requirements of the Irish building regulations. WTI can liaise with other government, industry and technical bodies for the benefit of Irish companies and timber users.

WTI is supported by COFORD, the National Council for Forest Research and Development of the Department of Agriculture, Food and the Marine.

WTI aims are to provide independent technical advice on design, manufacture, specification and use of wood and timber products for the benefit of Irish consumers and Irish industry. The areas covered include structural timber and timber products used in building, timber frame construction, joinery products, panel products, flooring, cladding, fencing, decking and a range of other timber and wood products used in buildings.

Headed up by Bill Robinson and Bob Davis, WTI can be contacted at 089 4330562 or email WTI.timber@gmail.com

2008 when they went on to increase production and export market share.

Finally, domestic demand is likely to increase significantly over the coming years if the government achieves its annual target to increase house building to 25,000 units.

Aurivo sells ECC shareholding to the Fahy family

Congratulations to PJ Fahy and his team in ECC on the recent announcement that Aurivo Co-Operative Society has sold its majority shareholding in ECC Teo the Cornamona, Co. Galway sawmill. Aurivo's stake in the business has been acquired by P.J. Fahy, the minority shareholder. The funds received from the sale will be invested

in the co-op's core business and new investment opportunities.

“ECC has always been a family run company but now it is a family owned company,” said P.J. Fahy. “We enjoyed an excellent partnership with Aurivo since 1992 and now our family and team at ECC look

forward to the next era. We are lucky to have an excellent workforce based in such a supportive community,” said Daryl Fahy. “ECC will continue its development as an innovative and successful company capable of increasing market share in Ireland and the UK as well as providing much needed employment in rural Ireland.”

Timber price data for January to June

Despite the fall in sterling against the Euro from November last year, log prices have held up remarkably well.

Medium to large log prices were down 5% for the first six months this year compared to the same period in 2015 but small log prices from first thinnings were marginally up.

Prices are made available by Coillte and Wood Price Quarterly (WPQ). WPQ provides price data issued by UCD in collaboration with the Irish Timber Growers Association (ITGA) for the private sector. Prices are for standing timber.

Small logs

That small logs prices are performing well may be partially due to strong wood energy markets. Wood energy and panel board markets are the main outlets for small logs from first thinning.

Wood energy is a domestic market, so, it is not as prone to currency fluctuations, while the panel board market is not as heavily reliant on the UK market as sawlog and is therefore partly buffered against sterling fluctuation.

Medium to large logs

While medium to large log prices have marginally decreased, they remained steady for the first six months. Medium sized logs (0.25-0.32m³) have averaged €45m³. These prices provide an income of up to €2,500 at third thinning based on five-year thinning cycle which will increase with further thinnings (Table 1).

For example a 30-year old high yielding Sitka spruce crop can provide revenue of €2,000/ha from third thinning and up to €3,000/ha from a fourth thinning (Table 1).

The price for large sawlog (0.4 to 1.0m³) has ranged between €53 to €64/m³. Logs in this size range are at, or close to clearfelling, which can provide revenue from €20,000/ha and upwards for well stocked high yielding Sitka spruce.

Future

Despite the dramatic fall in sterling against the Euro – £1.40 to £1.15 from 20 November 2015 to 15 August this year – log prices have held up remarkably well.

The next set of quarterly data will not be available until October but is likely to reflect a number of recent trends including the continued weak performance of sterling and market uncertainty following Britain's decision to leave the EU.

Table 1: Comparisons between prices (€/cubic metre (m³)) achieved for standing timber for Coillte and private sales for first two quarters 2016

Average tree size: m ³	Average prices: Coillte and private sales (€/m ³)				Approximate revenue range (€/ha)		Product breakdown: Approximate log category %: pulpwood, boxwood and sawlog
	Coillte Jan-Mar	Private Jan-Mar	Coillte Apr-Jun	Private Apr-Jun	from thinnings: Fully stocked spruce forests		
Up to 0.074	N/A	11.80	N/A	*10.49	450-550		First thinnings, mainly pulpwood, fuel wood and 10-15% small sawlog.
0.075 - 0.124	N/A	13.90	N/A	14.00	500 -700		
0.125 - 0.174	N/A	16.20	N/A	16.04	700-900		2 nd to 3 rd thinning -producing 54% pulpwood; 46% small sawlog and stake material.
0.175 - 0.224	N/A	23.40	N/A	21.17	1,00-1,100		
0.225 - 0.274	42.80	*16.80	44.11	N/A	1,900-2,200		3 rd thinning - small to medium trees (up to 0.3m ³). Likely market: 15% pulpwood; 45% small sawlog; 40% large sawlog.
0.275 - 0.324	45.56	24.10	47.39	*9.00	1,200-2,400		
0.325 - 0.374	N/A	29.30	46.73	N/A	1450-2,400		
0.375 - 0.424	51.43	N/A	53.29	N/A	2,400-2,700		4 th thinning - around 0.5 m ³ each - mainly 60% large sawlog; 30% small sawlog; and 10% pulpwood.
0.425 - 0.474	52.09	62.10	53.32	50.27	2,500-3,000		
0.475 - 0.499	57.09	N/A	57.35	N/A	2,900-2,900		
0.500 - 0.599	56.96	N/A	57.68	*44.25	2,800-2,900		
0.600 - 0.699	57.88	*65.00	60.96	*65.00	2,900-3,000		5 th or final thinning - medium to large trees (.6 to .7 m ³) mainly: 80% large sawlog; 15% small sawlog; and 5% pulpwood.
0.700 - 0.799	61.41	35.00	56.58	*57.50	1,700-3,050		
0.800 - 0.899	63.33	38.20	59.70	N/A	1,900-3,150		
0.900 - 0.999	59.89	N/A	60.83	*57.50	2,900-3,050		Final thinning or clearfell - large trees (over 0.9 m ³), mainly large sawlog material.
≥1.000m ³	63.18	*65.00	64.35	61.21	2,900-3,200		

Source: Adapted by D. Magner from prices per m³ provided by Coillte and Irish Timber Growers Association (ITGA) for standing sales.

Coillte prices are for sales to sawmills. They include 'buyback' or 'retention' sales whereby Coillte retains pulpwood material.

Price information from ITGA based on UCD confidential survey of a small number of sales so prices can vary considerably.

Revenue range for thinnings usually at five-year intervals (average yield 50m³/ha). When average log sizes reach 0.6 m³, the crop may be ready for clearfell.

* Private sale prices for small sale lots not factored in to revenue range per hectare.