2014 Europe Grower Study Tour

Richard Mulcahy AUSVEG Ltd

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Purpose:

The purpose of this report is to detail the findings resulting from the 2014 Europe Grower Study Tour to the Germany and France (VG11706), in line with the reporting requirements outlined in the project contract.

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1.0 Media Summary

The 2014 Europe Grower Study Tour took place in February 2014 and provided eight vegetable levy payers with the opportunity to visit innovative vegetable producers, pack houses and researchers throughout Germany and France and attend Berlin Fruit Logistica 2014, one of the largest fresh produce trade events in the world. The study tour was funded by HAL using the National Vegetable Levy, voluntary contributions from industry and matched funds from the Australian Government.

The main focus of the study tour was to educate vegetable growers about the latest production methods and business structures operating in Europe and provide access – through Berlin Fruit Logistica 2014 and site visits to farming operations – to a range of networking opportunities involving importers and exporters, vegetable producers, the wholesale and retail trade, packaging and transport representatives.

Growers were able to visit farming operations in the brassica hub of Europe – Brittany – which accommodates field production, as well as greenhouses. With 25% of the national output, Brittany is the leading region for vegetable crop production in France and one of the most important within Europe. Therefore, it served as the perfect destination for the study tour in order to facilitate learning opportunities for vegetable levy payers. Major regional crops in Brittany include cauliflower, artichoke, shallots and broccoli (comprising 80% of national production for these four). Field cropping of vegetables covers around 70,000 hectares, largely in the northern coastal area where good soils and a favourable maritime climate allow year-round production. It was for this reason that Brittany, and neighbouring Normandy, were chosen for the tour. With their favourable growing conditions this enabled participants to see production both in the field and in greenhouses, even though the tour occurred during winter. Two vegetable grower cooperatives operating under the leading Prince de Bretagne brand were visited, as well as three key vegetable regions operating under the widely marketed Primeale brand.

Written evaluations were undertaken by tour members after each day of the tour and debriefing sessions were held regularly throughout the study tour to discuss key information and findings. These findings were recorded in the tour diaries supplied to the participants to ensure there was a written record of each day's events and that the information was retained.

2.0 Expected outcomes and how they were achieved

The primary objective of this project was to provide Australian vegetable growers with exposure to production techniques and technologies currently being utilised by growers in Europe, particularly in France, with particular insights sought on the production and marketing of produce, export activities, packaging ideas, and business structures, as well as insights into new product developments and machinery that may be applicable to Australian operations.

Berlin Fruit Logistica 2014 provided growers with access to leading scientists, agribusinesses and marketing professionals, as well as importers/exporters. Over 2,600 exhibitors from 84 countries were represented at Fruit Logistica 2014 and the event was attended by more than 62,000 trade visitors from 141 countries.

A major benefit achieved from attending Fruit Logistica was the direct networking connections made by the tour attendees with leading scientists, growers and agribusiness professionals in the fresh produce industry. Growers were also able to have meetings with importers interested in the trade of Australian vegetables. Attendees had the opportunity to witness innovations as part of the Fruit Logistica Innovation Award (FLIA), which is presented each year at Fruit Logistica in Berlin for outstanding innovation in the fresh produce sector. Innovations on display included products, services and technical innovations.

In addition to Berlin Fruit Logistica, the tour provided attendees with the opportunity to converse with their European counterparts and a variety of industry experts in machinery, irrigation, fertilisation, packing operations and other aspects of commercial growing. This knowledge was obtained by visiting a range of farms, pack houses and research stations in Brittany and Normandy in northern France.

It is expected that the Australian growers who participated in the tour will bring back their acquired knowledge of European vegetable production systems, research, marketing and business models, and share this with their colleagues in the Australian industry.

A range of feedback was received from participants on the different components of the tour to assist in evaluating outcomes. The below quotes provide an overview of the feedback received and have been extracted from the tour evaluation forms:

- "Broad variety of learning opportunities. From Fruit Logistica to packing sheds, farmers and management through to the cooperatives."
- "Definitely something all growers should consider doing and I will recommend to anyone interested that it is well worth it."
- "I highly recommend this tour to other growers because of its intensive and informative education. It opens up the growers' eye on the necessity of getting close together in groups and collaborating by sharing similar sorting and packing equipment rather than wasting resources."
- "I would recommend the tour because I found it very educational."

- "Good to see how the other side of the world operates. You can pick up little bits and pieces that can be adapted on your own farm."
- "We all learnt from people in the agenda but we also communicated with each other and shared a lot of stories."
- "Bayer again were very informative and gave us an insight into how much research goes into producing a new chemical. It was also pleasing to see that they are committing more and more funding into biological control."
- "Bayer, this is something that we all have an interest in. Found very interesting, guides very informative. Amazed at the level of technology. A worthwhile visit."
- "John Deere was probably one of my favourite parts of the tour. To get up so close to the production lines of such an iconic brand in the ag industry was incredible."
- "So lucky to see tractor manufacturing close up. Excellent."

3.0 Tour Report

Day 1 – Melbourne, Australia – London, United Kingdom

(Travel Day)

Day 2 – London, United Kingdom – Berlin, Germany

(Travel Day / Rest Day)

Day 3 – Berlin, Germany (Fruit Logistica)

Day 3 saw the tour participants attend Berlin Fruit Logistica 2014. Berlin Fruit Logistica is the leading international meeting place of the fresh produce trade. The exhibition covers every segment of the fresh produce business, and features players from all the world's produce markets, offering a comprehensive overview of the market for all products and services. It's an enviable opportunity to meet decision-makers from around the globe, and it showcases the latest innovations in the sector.

The trade fair presented a fantastic opportunity for Australian vegetable growers to visit a range of exhibitors over a two-day period. Growers on the tour were particularly interested in any new machinery or equipment that might generate efficiencies in their own operations, as well as new product varieties or new technologies that could provide an advantage.



Growers had the opportunity to visit a wide variety of trade stands and make enquiries about various new products and machines.



Convenient BBQ vegetable packs were one of the many new product developments that were on show at Berlin Fruit Logistica 2014.



The exhibition featured over 2,600 exhibitors, including suppliers, seed and chemical companies.



Growers were very interested in machines that could create efficiencies, such as this plastic crate making machine from UniTec.





A wide range of innovative new products were on display at the trade exhibition, such as Fioretto (left) and Vegetable Crumbs (right).

A range of innovative product developments were studied as part of the Fruit Logistica Innovation Award (FLIA). These new products included Fioretto, a long thin-stemmed new variety of cauliflower from Japan, and Vegetable Crumbs, a pure vegetable coating from Italy, available in a range of varieties such as Carrot Crumbs, Celery Crumbs and Spinach Crumbs. Other innovative products on show included: a BBQ Grill-Mix developed in Switzerland that is sealed with a special film which keeps the product under vacuum to ensure longer freshness and optimal presentation; and, Extended shelflife packaging for broccoli, developed in the Netherlands, which has been specially developed to provide increased shelf-life by creating a special natural atmosphere inside the packaging film without chemicals or gases. The packaging can reportedly increase the shelf life of broccoli, cauliflower and other brassicas by 5-8 days at 18 degrees Celsius. The 2014 FLIA was awarded to the BBQ Grill Mix from the Eisberg company based in Switzerland. This new convenience product was described as a quick and easy solution for barbecue lovers.

The full list of nominees for the 2014 award was as follows:

1. Aureli Mario, Italy: "Vegetable Crumbs" for breaded vegetables

2. Azienda Agricola Campobasso Marco, Italy: "Fette di Sole" – snacks made from dried orange slices

3. BrimaPack B.V., Netherlands: "Extended shelf life packaging for Broccoli"

4. Eisberg Group, Switzerland: "BBQ Grill Mix" – a new convenience product for barbecue enthusiasts

5. Home Harvest Salads Ltd, UK: "Oriental Mixed Living Salad" – freshly harvested at home

6. If co Systems GmbH, Germany: "Folding reusable plastic containers for bananas" – designed for the global banana trade, from the field to the supermarket shelf

7. Internationale Fruchtimport Gesellschaft Weichert, Germany: "Uurú, the original banana" – organically-grown bananas from Ecuador with intense, exotic flavour

8. Tokita Seed, Japan: "Fioretto"- long-stem cauliflower with small heads

9. Verpackungszentrum Graz, Austria: "Compostable packaging nets from beechwood cellulose" – sustainable production, eco-friendly composting

10. ZTI Mechatronics BV, Netherlands: "Grape destemming machine" – to separate the fruit from the vine

Growers attending Fruit Logistica also expressed interest in a range of machinery solutions, including a random weight pumpkin pricing/sticker machine that had achieved a higher processing rate than the equivalent product in Australia, providing increased efficiency in the pack house and combining multiple operations within the one machine. A range of 'organic friendly' cardboard packaging that could be used for organic vegetable products at the point-of-sale (pictured below) was also viewed as having great commercial potential.





Cardboard 'organic friendly' point-of-sale packaging (pictured above) was seen as a particularly attractive marketing proposition by some organic growers.

Day 4 – Berlin, Germany (Berlin Wholesale Markets & Fruit Logistica)

To start Day 4, the group departed early for a 7.00am visit to Fruchtof Berlin – the Berlin vegetable wholesale market. The group met with Dieter KrauB, the manager of the produce section of the

market, and took an extensive tour of the market to understand and compare its operations with Australian wholesale markets.

The group noted that its operations were extremely similar to those in Australia, with the main difference being that the Berlin Wholesale Market had a wider range of products, including grocery and convenience items.

'Fruchthof' is open nearly round-the-clock, six days a week. The wholesalers offer comprehensive delivery services far into the region around Berlin and more than 200 largely roofed-over customer parking spaces.



Berlin Wholesale Fruit and Vegetable Market

- Total floor space 85,000 m²
- Hall 30,000 m2, including 22,000 m² sales space
- 50 wholesalers (1,000 employees)
- More than 500 varieties of fruits and vegetable (incl. seasonal products)
- Handling volume: ca. 220,000 tonnes/year
- 80 covered loading ramps
- 120 electric forklifts
- Central commercial refrigeration system
- Completely modernised in 2007 (18 million Euro)

Following the market visit, the tour group returned to Fruit Logistica for a second day of the exhibition. Labour saving measures through capital investment, such as more efficient machinery, were at the forefront of growers' minds whilst inspecting a variety of different machinery solutions.

Tour attendees also expressed interest in biogas generation through the construction of a biogas plant, however, it was determined that this was not commercially viable for individual growers, with the size of the plants and the capital cost prohibitive at this stage. Manufacturer GreenWatt explained that work was underway to investigate the feasibility of a micro-biogas plant that could be built on-farm and would involve less capital expenditure. Other considerations included the scale of production and therefore waste generation required to make the plant viable.





Growers were also able to meet with leading Bayer CropScience representatives at Fruit Logistica on Day 4 of the tour and hear about developments in biological crop protection solutions. They also viewed a presentation about the Bayer sustainability radar and food chain partnerships, which are helping growers to produce highquality food according to the principles of sustainable agriculture.

Day 5 – Berlin, Germany

(Rest Day)

Day 6 – Berlin – Frankfurt – Heidelberg – Mannheim, Germany

The majority of today was taken up by travel. The tour group travelled from Berlin to Frankfurt by fast train, and then by bus to Lustadt to visit leading seedling and vegetable producer, Rudolf Sinn GmbH. The group was met by the owner, Rudolph Sinn, and his son Stephen on-site. Rudolf Sinn GmbH produces beetroot, corn salad, celery and other crops, which are then sold in France, Austria and Dusseldorf.

The company produces approximately 10 million plants per year and has been able to address rising energy overheads by utilising a local bio-energy plant that is only a short distance from the farm. The company has 60,000 square metres of seedlings in production, and also produces organic seedlings. The Sinn's explained that early annual returns for their organic business were around 20% each year, but this had now settled at around 8% per annum. In relation to heating in the greenhouses, the business utilises energy efficient hot water heating pipes.





Growers toured Rudolph Sinn's greenhouses in Lustadt and were impressed with the business' utilisation of a local bio-energy plant to save on energy costs.





Growers were particularly impressed with the high quality of Rudolf Sinn GmbH's produce.

Day 7 – Mannheim (John Deere) – Monheim (Bayer CropScience) - Cologne

John Deere is one of the world's largest and most successful agricultural companies. It is considered a leader in the production of premium tractors and is recognised globally for its high levels of innovation.

The tour group arrived at John Deere in Mannheim for an exclusive tour of the tractor production facility. John Deere Germany's turnover of 3.29 billion constitutes 40 per cent of the turnover of the German agricultural engineering industry, meaning that it is a significant player in the German agricultural industry. The company has a successful history of innovation in agricultural.

The tractor factory in Mannheim is the second largest in the world, manufacturing 40,000 tractors each year, with the majority of tractor exports to Western Europe (56%); exports to Asia and Australia/New Zealand make up 6% of total exports.





The John Deere factory in Mannheim is the biggest John Deere production factory outside of North America, having produced over 1.6 million units since 1921.

Growers were provided with an exclusive tour of the tractor assembly factory, however, no photographs were permitted for confidentiality reasons. The tour attendees were surprised that the tractors were made to order and not mass produced to a set specification. It was also noted that this customisation allowed John Deere customers to modify their orders to meet their specific needs. In other words, a one size fits all approach was not utilised in the production line. Instead, this was an

example of large scale production of premium-high quality machinery to meet the customer's individual needs.

In the afternoon the tour group travelled from Mannheim to Monheim to visit Bayer CropScience's global headquarters. Bayer CropScience is one of the world's leading innovative crop science companies in the areas of seeds, crop protection and non-agricultural pest control.

No photos were permitted for confidentiality reasons, however, the group was able to visit several important R&D sites at the property in order to obtain a better appreciation of the production processes employed in creating new chemistries.

The group met with Judith Wehr from Bayer and visited the Residue Analysis, Compound Logistics and Disease Control – Fungicides, sections of the facility.

In relation to the scale of the R&D operation undertaken at the Monheim headquarters it was noted that the company employed 1,800 staff on-site, including 1,100 working on R&D projects alone.

The tour group learned that the Bayer Compound Logistics facility is one of the most modern systems in the world for storing chemical compounds and that it currently has a library of 2.5 million compounds, with 150,000 being added each year. The facility has been future-proofed with a total capacity of 80 million vials.

The purpose of the Compound Logistics facility is to store, prepare and distribute substances prior to comprehensive biological testing. Over 15 robots work at the facility retrieving vials for efficient supply to researchers in the Bayer R&D laboratories, ensuring that the scientists are supplied with the precise quantities that are required. The process is highly resource efficient and ensures significant labour savings.

Overall, growers were very impressed with the Bayer research facilities. They expressed particular interest in the new products coming to market under the Bayer biologics range. The development of this range of products follows Bayer's acquisition of US-based biologics business AgraQuest for around US\$500 million in August 2012. The biologics products are made through fermentation and are made from naturally occurring microorganisms.

Day 8 – Cologne, Germany – Brest, France

(Travel Day)

Day 9 – Brest, France (farm / site visits)

Day 9 saw the tour group travel from Brest to St Pol-de-Leon to visit SICA, one of the most important producers' organisations for vegetables in France. SICA is a vegetable grower cooperative of 1,500 vegetable growers that produces 300,000 tonnes of vegetables annually.

It is part of a cooperative of three linked organisations (Terres de St Malo and UCPT being its sister organisations) that farm in the three key vegetable growing regions of Brittany. All three organisations work together on R&D, production and marketing. Located on the coastal fringe of northern France, the cooperatives produce vegetables under the widely marketed Prince de Bretagne brand and they are governed by a Board of Directors.

The SICA cooperative was formed in 1961 and is now highly successful, providing benefits to many individual growers operating on a smaller scale, such as group marketing, centralised pack houses and organised and coordinated R&D. Staff are employed by the cooperative to manage aspects of quality assurance, communications and research. All vegetables are produced to the same specification and are thereby marketed under the single brand. The tour group learnt that the grower members of the cooperative must be committed to implementing regulations for the production, selling and promotion of vegetables.



Growers meet with SICA Comms Manager, Gwenaelle Roignant.



The CATE Research Station in Saint-Pol de Leon, Brittany.

By joining together, French growers have been able to achieve scale and influence that they would have been unable to obtain by themselves. The progress of the cooperative has been so successful that it has led to the creation of a more efficient road network; improvements in telecommunications, the creation of a deep water port in Roscoff and a maritime company to welcome ferries; and the launch of the Brit'Air company.

The use of an auction market is utilised to ensure a fair and transparent method of sale, as well healthy relations with shippers. From a relatively poor area, the area of Brittany has increased its status and is now recognised as one of the most dynamic and innovative business regions in France.

Part of the success of the Prince de Bretagne brand under which growers' produce is marketed can be owed to the diversification of markets. Over 40% of the vegetables produced are exported within Europe. In order to ensure logistics are efficient and effective, 22 packing stations have been developed within close proximity to the key growing areas. This enables efficient transport by growers under a shared cost structure. The packing station centralises growers' deliveries, forwards information to SICA which then markets them, and prepares orders in line with shippers' purchases.

SICA of St-Pol-de-Leon employs 126 staff and has provided significant economic benefits to the region, resulting in the creation of 6,000 direct jobs and 20,000 indirect jobs. The main products produced by

the cooperative are cauliflowers (159,000 tonnes), artichokes (24,000 tonnes), tomatoes (29,000 tonnes), shallots (25,000 tonnes) and lettuce (15,000 tonnes). That said, production has been diversified extensively over the years and the product range now includes baby vegetables, Romanesco cauliflower, petit violet artichokes and lamb's lettuce, among many others.

Following the visit to SICA, which was an eye-opening insight into the benefits of a different business structure, incorporating everything from shipping to production, packing and branding, the group visited the nearby CATE Experimental Research Station.

CATE provides services to growers and is funded 50% with public funds, 25% from grower trials and 25% by the grower cooperatives. CATE has an operational budget of 1.6 million Euros and has a team of 18 people, including 8 researchers, which undertake services for outdoor and indoor production as well, as ornamental horticulture and mushrooms.

The benefit of CATE to the growers is that it looks at regional specific R&D issues and is effectively owned by the grower cooperative. The CATE station also operates trial plots of 12 hectares outdoors and 1 hectare of glasshouses and plastic greenhouses. Key objectives of the facility are to increase the competiveness of growers by improving the quality and shelf-life of produce. Tour participants learnt that the biggest problem affecting growers in the area was Club root, with crop rotations now becoming an issue. New cauliflower varieties that are resistant to Ring spot had recently been used.

Following the visit to the CATE Research Station the tour group travelled to Manoir Du Bant to visit Daniel Cadiou, a large producer and exporter of shallots, onions and legumes. Daniel Cadiou is both a wholesaler/buyer and an exporter. Growers met with Pierre Batardiere (Export Manager) and Julie Miossec (Sales). Tour participants were able to gain insights into the marketing processes and the export market development activities undertaken by Daniel Cadiou.



A tour of the Daniel Cadiou packing shed providing insights into the production processes.



Daniel Cadiou's packaged shallots, ready for export.

Day 10 – Brest – Saint Malo, France (farm / site visits)

To start Day 10 the tour group travelled from Brest to Paimpol (two hours away). The group visited the UCPT cooperative today- a sister organisation to the SICA cooperative located in St-Pol-de-Leon. UCPT is another cooperative operating under the Prince de Bretagne brand and it has 650 producer

members. Due to the mild climate vegetables are able to be produced on a year-round basis. The tour group met with UCPT Director, Guillaume Rostoll, who provided the group with a tour of the auction market and pack houses, and took the growers on a farm visit to meet with UCPT cauliflower grower Christoph.

The group learned that the cooperative utilises standardised quality assurance and residue testing, producing over 30 different types of vegetables. The main observation from the tour group was that this cooperative also utilised the Dutch-auction system of marketing and that (as was the case at SICA) growers were able to take advantage of combined marketing and pack houses. It was noted that SICA was twice as big as UCPT. Mr Rostoll explained that the growers had been able to command a better price by working under the cooperative model, particularly from the five main supermarket retailers.

The funding model that underpins the cooperative was better explained on this visit and the group learnt that the cooperative was funded by a 3% commission plus funds from the European Union CAP. The main advantages of the cooperative model were in sharing costs related to capital investment (e.g. machinery and pack houses) as well as joint export marketing initiatives.

The formation of a unique seed company that specifically supplied seed for members of the cooperative was viewed as a novel innovation by the tour group. The seed company was called OBS and it was able to produce seed at a 20% cheaper price than an external provider providing a significant price advantage to growers. Another insights was that energy saving measures, such as the use of cover crops, were very common. A low cost base through cheaper seed, energy use savings, shared equipment and close proximity to pack houses, meant that growers were extremely cost competitive, and around half of the produce grown by UCPT was exported to Europe, mainly to the UK and Germany.

Following the visit to the UCPT office and to a packhouse, the group travelled to visit UCPT cauliflower grower Christoph. The group learnt that Christoph was farming 45 hectares and employing similar practices to those in Australia. Plant beds were further apart and more spread out and the packing shed was only 800 metres away, however, practices were otherwise very similar to Australia.



The UCPT auction market in Paimpol was very similar to the auction market in Saint-Pol de Leon.



Growers met with UCPT cauliflower and artichoke grower Christoph, who farmed 45 hectares.

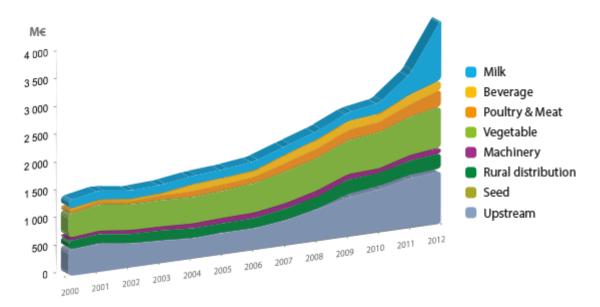
Following the visit to Christoph's farm, the tour group travelled to the Organic Research Station. The station was a sister station to the CATE station, with the main difference being that it exclusively focused on organic vegetables and regional specific issues. By focusing specifically on organic research the station was able to address the specific needs of the organic members of the cooperative.

Day 11 – Saint Malo – Saire Valley – Cherbourg, France (farm / site visits)

Day 11 saw the tour group visit Agrial, a large commercial vegetable grower cooperative with 10,000 members and 11,000 employees. The group first travelled to the Agrial station in Saint-Greges-de Grehaignes, where they met with Mr Sebastian Vautier (Manager of the Station), Mr Thierry Bisson, (General Manager of Production for Agrial Vegetables), and Mr Gilbert Le Guillou (Commercial Export Manager for Primeale).

Primeale is a key vegetable brand of the Agrial agricultural cooperative that operates throughout France. The Agrial Group had a turnover of \$3.9 billion Euros in 2013, up 8% compared with 2012. One of its key agricultural divisions is in vegetables and the tour group were fortunate to be able to meet with three senior executives from the business and visit a range of farms and packing facilities across three of Agrial's key growing regions in Normandy.

The group learnt that the Agrial Group was formed in 200 from the merger of three cooperatives and operates across a variety of food production types. The scale of production across the various categories is vast, with dairy and vegetables of the largest components of the business.



The graphic below illustrates the scale and evolution of the Agrial agriculture operations.

Today Priméale has collection and packing sites in a variety of vegetable areas in France, Spain and Portugal and it therefore has the opportunity to take advantage of different production calendars ensuring year-round supply for its customers.



A map depicting the vegetable production areas farmed under the Primeale brand name for the Agrial cooperative.

The Agrial cooperative farms across 6 growing regions and employees 1060 employees.

490,000 tonnes of vegetables were marketed in 2011 with sales of 282 million Euros.

In meetings with the Agrial executives, the group were able to visit several pack houses and farms. Today, Primeale markets more than 550,000 tonnes of vegetables. These vegetables are mainly carrots and potatoes, but also salads, asparagus, garlic, onions, shallots, leeks, cabbages, celery and turnips.

In addition, Primeale markets a range of fresh vegetable mixes that are packed ready to cook for stews and soups. There are three divisions under the Agrial Cooperative – Prim'co, Vert Frais and Terre de France, whilst the three main brand names are Primeale (fresh vegetables), Florette (prepared vegetables) and Crealine (cooked vegetables e.g. soups).



Primeale branded potatoes ready for sale.



Growers visited Agrial leek grower Maxime in St Georges de Grehagne.



The Primeale trade stand at Berlin Fruit Logistica was very impressive.



Growers tour one of the many centralised Agrial packing sheds.

Florette, Agrial's other large vegetable brand, operates in the lucrative ready-to-use vegetable market. Florette is today seen as a leader in Europe in the ready-to-use salad and vegetable market and produces 1.8 million bags of salad a day across 16 production sites in 10 countries.

Florette products are not only found in France, but also in Spain, the United Kingdom, Switzerland, Belgium, Portugal, Ireland, Germany, Luxembourg and Italy.

The product range includes a broad range of bagged salads, young leaves or mixed salads, such as lettuce, rocket, lamb's lettuce, escarole, etc. It also offers fresh, ready-to-eat or cooked vegetables in in packs, including celery, carrots, tomatoes, button mushrooms, radishes, and aromatic herbs.

The group heard that Primeale utilises sustainable agricultural practices and is a member of such schemes including IGP, Label Rouge and global GAP. Around 66% of Primeale product is produced for France whilst the other 34% is exported, mainly to Europe and the UK. The structure of the company is such that growers are shareholders, however, growers who are members of the cooperative rent their own land to farm.

Following the visit with the Primeale managers, the tour group was able to visit one of the Primeale growers in St Georges de Grehaigne. The group met with Maxime, a leek grower with 100 hectares of land and his own washing facility on-site. Growers were able to ask Maxime questions about his production cycle and understand and contrast the differences between Australian and French production of leeks.

Following the visit with Maxime, the group travelled to another Primeale station in Reville, where they toured the production facilities in the Val De Saire. In this area 25-35,000 tonnes of vegetables are processed through two packing stations. The installation of a unique leeking packing machine (costing 300,000 Euros) has seen the replacement of five staff with a machine and the reduction of labour costs. Key production in this area includes cabbage, cauliflowers, salad, baby leaf and leeks, of which 2.3 million packs of leeks are produced from the one machine each year.

The main observations from the Primeale site visits were again related to the benefits of the cooperative model in relation to resource sharing and group marketing. The Primeale brand has established itself successfully across France, as well as internationally, as a product recognised for its

high quality and freshness. Through membership to the cooperative growers are able to save money on transport (due to centralised packing stations), on marketing and on capital investments related to machinery and the establishment of packing sheds. They also don't need to negotiate with their customers and can focus on growing a high quality, high yielding product.

The main difference between Primeale and the UCPT/SICA cooperatives were that the UCPT/SICA cooperatives were more community based whereas the Primeale cooperative had more of a commercial focus, with a larger and more complex management structure, more professional staff and a greater volume of production. Primeale did not utilise the auction market system that was evident with UCPT and SICA, however, negotiations would occur directly with retailers and with agents and wholesalers.

Day 12 – Cherbourg – Paris, France

(Travel Day)

Day 13 – Paris, France - Dubai

(Travel Day)

Day 14 – Dubai – Home

(Travel Day)

4.0 Implications for Australian horticulture

The tour provided particular insights into the differences in the marketing of produce between Australia and France and the benefits that result for growers in France and Germany through strong export markets and a diversity of supply lines.

The main difference observed between France and Australia was that the majority of growers were part of regional cooperatives, working together under a single brand to take their produce to market. Shared marketing costs and a centralised organisational structure through regional cooperatives that worked in unison with one another under a broader nationally marketed brand was the model utilised by both cooperatives visited on the tour. The advantage of this structural approach was that growers could share costs and do joint marketing. For example, growers delivered their produce to a centrally located packing shed under an agreed specification and then this produce was marketed under a single recognised brand name to buyers both domestically and in export markets. Other significant advantages were evident through the establishment of regional R&D stations focused on tackling regional issues for growers in the local area. These were partly funded by the government, by the proceeds from trials and by the grower cooperatives (to which growers were members and paid a commission).

The buyer-seller marketing system operating in France was also significantly different to that in Australia. In the case of UCPT and SICA, buyers would gather in regional auction markets (pictured below). A Dutch-auction style system saw produce auctioned each morning, with a large display system showing the price that day of particular produce and participants bidding on that produce accordingly.





Vegetables sold under the Prince de Bretagne brand are mainly sold through the auction system created in 1961 by the founders of SICA. These auctions make it possible to address supply and demand, setting the price for vegetables daily. Growers supplies are available to 60 or so negotiators-shippers, which are registered to buy at the auctions (pictured above). The packing cost is added on top of the sale price, not included within it.

By contrast, the Agrial Group handled negotiations with its customers directly, including the major retail chains. In both cases the cooperative model appeared to provide significant benefits to growers, though it was difficult to gauge the relative profitability of the growers under the Primeale system as compared to the UCPT/SICA system without seeing financial records.

5.0 How the information gathered will be disseminated

Since the completion of the study tour, AUSVEG has encouraged participants to share information on what they learnt and experienced with their local counterparts and through their industry networks across Australia. One way AUSVEG has actively encouraged the participating growers to share their new knowledge with growers is by ensuring they participate in the upcoming AUSVEG National Convention and associated levy funded seminars.

Attending industry events will provide an opportunity for growers to access a large section of the industry in one place and, in doing so, facilitates the opportunity to engage with colleagues in the industry and share knowledge.

AUSVEG will also publish an article in an upcoming edition of *Vegetables Australia* communicating the key findings from the tour. This will cover the main activities and other important information discovered as a result of the study tour. The magazine is sent to approximately 6,000 industry members.

National Levy Payer Meetings also provide an excellent opportunity for AUSVEG to communicate the benefits of these tours, to convey outcomes to other levy payers, and to encourage growers to take advantage of similar educational opportunities in the future.

European Grower Tour & Berlin Fruit Logistica Trade Fair

Tour Itinerary

February 4 – 18, 2014

	Melbourne – London
Tuesday 4	*Connecting flights to Melbourne
February	4:15pm – 5:10am (arrives next day): Flight QF9* Melbourne, Tullamarine to
	Heathrow Airport, London.
	London – Berlin
Wednesday 5	7:05am – 9:55am: Flight BA 990 Heathrow Airport, London to Tegel Airport, Berlin.
February	10:00am : Mini-bus from BCS Bus Service waits outside baggage claim with a sign [AUSVEG] to take you to your hotel.
	Meet German interpreter at Airport, Kevin Carlo Gabel
	10:40-11:00am: Transfer to hotel (with Kevin), store luggage until check in.
	11:15am-1:00pm: Lunch at local restaurant/hotel restaurant.
	1:00pm : Check in to hotel, afternoon free to rest.
	7:00pm: Group Dinner
	Fruit Logistica
Thursday 6	7:30am: Breakfast at the hotel.
February	8:30am: Meet interpreter (8:30am – 4:00pm) and depart for Fruit Logistica (~20 mins walk from hotel).
	9:00am : Fruit Logistica Trade Fair, and the FreshConex International Trade Fair for the fresh produce convenience industry, both taking place at Messe Berlin.
	6:00pm: Bayer Networking Event
	The AUSVEG group has also been invited to join the Thursday evening event at the

Bayer stand which will highlight the achievements of Bayer's food chain
management team in Greece with traditional food, drinks and music at the booth.
The Thursday evening event starts at 6pm (as the exhibition closes) and is drinks,
finger food and entertainment. The event is hosted at the Bayer stand and will go for
approximately one hour.
7:30pm: Group Dinner
Fruchtof Berlin/ Fruit Logistica
6:30am : Bus departs with interpreter from Hotel to Beusselstrasse 44 N-Q Markets.
6:50am: Arrival at Markets – Beusselstrasse 44 N-Q.
7:00am – 8:00am: Meet Dieter Krauß at the Markets for tour of the Fruit &
Vegetable section of the Berlin Wholesale Markets.
This huge wholesale fruit and vegetable market consists of many wholesale
distributors supplying groceries and markets in the greater Berlin area. Dieter Krauß
is the manager in charge of the Fruchtof Berlin section of the markets.
8:00am: Bus departs from Markets and returns group to hotel.
8:20am: Arrive –Hotel.
8:20am: Breakfast at hotel.
9:00am : Depart for Berlin Fruit Logistica (~20 mins walk).
9:30am – 10:30am : Meet Christine Brunel-Ligneau and Richard Dickman at the Bayer CropScience booth who will introduce relevant food chain projects in the APAC region.
10:30am +: Remainder of the day available to attend the trade fair.
7:00pm: Group Dinner hosted by E. E. Muirs (approx. 15 mins drive from hotel)
Berlin
8:30am: Breakfast at hotel.
9:30am : Meet in the hotel lobby ready for a bus tour of Berlin with Harald Zawuski.
12:30pm: Tour ends back at the hotel.
1:30pm : Lunch at local restaurant with interpreter, Kevin.
2:30pm +: Afternoon is free for individual sightseeing/shopping.

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Mannheim – John Deere (Mannheim) – Bayer CropScience (Monheim) - Cologne		
elcome,		
the		

	5:00pm : Depart Bayer headquarters in Monheim and head to Cologne hotel (approx. 30 mins).		
	Monheim – Cologne		
	5:30pm: Check in at Hotel.		
	7:00pm: Group Dinner.		
	Travel Day		
Tuesday 11	8:30am: Breakfast at Hotel, Cologne.		
February	10:45am : Check out and meet in the hotel lobby.		
	11:00am : Depart – airport transfer from hotel to Cologne Bonn Airport (approx. 25 mins).		
	11:30am : Arrive Cologne Bonn Airport (CGN), Cologne Bonn Airport, Kennedystraße, Köln. Check in luggage and head to boarding gate.		
	1:25pm – 2:40pm: Flight AF1217* Cologne to Charles de Gaulle Airport, Paris		
	*Meet with French interpreter, Jean-Michel Defoilhoux at CDG.		
	3:35pm – 4:50pm: Flight AF7738* Paris Charles de Gaulle to Brest Airport (Brest Bretagne Airport, Aéroport Brest Bretagne, 29490 Guipavas)		
	5:00pm : Bus arrives at Brest Airport with sign [AUSVEG] to greet the group at the arrivals area.		
	5:20pm: Depart Brest Airport for hotel in Brest (approx. 25 mins).		
	6:00pm: Check in at hotel.		
	7:00pm: Group Dinner.		
	Brest, France		
Wednesday 12	7:15am: Breakfast at the Hôtel Le Continental (included).		
February	7:50am : Meet interpreter Jean-Michel in hotel lobby; bus arrives at hotel.		
	8:00am: Bus departs from hotel to SICA farm visit.		
	8:55am: Arrive at SICA St Pol-de-Leon and meet contact Ms Gwenaëlle ROIGNANT, Communication Manager of SICA at the 'Marché au Cadran'.		
	9:00am-11:00am: Take tour at SICA.		

	SICA is the one of the most important producers' organisations with regards to vegetables in France, combining 1500 vegetable growers and producing 300,000 tonnes of vegetables annually.	
	Visit the "Marché au Cadran" (main auctions market for vegetables in Brittany) at 9.00am (1h), followed at 10.00am by a tour of a packaging unit (1h).	
	Located on the coastal fringe of northern Finistère, the cooperative is made up of 1,500 farms with very different activities: field vegetables under cover, agricultural produce and more. What unites the different farming operations within SICA Saint- Pol-de-Léon are strong and shared values: the attachment to the land and means of production, a spirit of solidarity, a dynamic approach to European markets.	
	11:00am : Depart SICA and head to meet Mr Michel Le Roux, Manager of the Experimental Station of CATE (Technical and Economic Action Commission) of St-Pol.	
	Located close to SICA, the station grows quite a range of vegetables.	
	11:20am : Arrive at Experimental Station of CATE, St-Pol.	
	11:30am-12:45pm : Take tour of Experimental Station of CATE with Mr Michel Le Roux.	
	1:00pm-2:15pm: Group lunch.	
	2:30pm: Depart for Daniel Cadiou farms.	
	3:00pm : Arrive at Daniel Cadiou farms and take a tour (approx. 1 hour).	
	Daniel Cadiou's product range includes shallots, onions and legumes, among others.	
	4:00pm : Bus departs for the hotel in Brest.	
	4:40pm : Arrive at hotel in Brest.	
	7:00pm : Group meets for dinner in the town/at the hotel (with bus driver and interpreter).	
	Brest, France	
Thursday 13	7:30am: Breakfast at the hotel.	
February	8:30am: Check out and meet interpreter Jean-Michel in hotel lobby.	
	8:45am: Bus arrives at hotel.	
	Depart Hotel Le Continental, Brest, and head for Paimpol to meet Guillaume from UCPT grower cooperative.	
	11:00am : Meet Guillaume from UCPT for a presentation on their cooperative.	

	UCPT is a cooperative organisation of vegetables in Brittany. It brings together producers of fresh vegetables Côtes d'Armor, between Paimpol and Tréguier.			
	The soil and climate of the north Brittany coast make it an ideal basin for the cauliflower, the artichoke, the Coco de Paimpol, the early potato.			
	These traditional vegetables were added over the years to other products such as tomato (cluster, round, cherry, cocktail, old varieties), the strawberry, the broccoli, and a wider vegetable range (green cabbage, romanesco, fennel, zucchini, eggplant, lettuce, garlic), as well as old vegetables (artichoke, rutabaga, squash, parsnips, turnips, beets). Most of these vegetables are now available in organic farming at UCPT thanks to constant development since 1998.			
	12:00pm : Dine at a recommended local restaurant, "L'Islandais" (French and Breton cuisine) for lunch with UCPT.			
	1:30pm : Travel to nearby farm operations, pack houses and greenhouses guided by the UCPT representatives.			
	4:30pm : Depart the farm visits for your hotel in St Malo.			
	6:00pm : Arrive and check in at Hotel Best Western Alexandra [138 boulevard Hebert, 35400 Saint-Malo]			
7:00pm : Meet for dinner (with driver and interpreter)				
	St-Malo – Saire Valley – Cherbourg – Farm Visits			
Friday 14	6 :15am : Breakfast at the hotel.			
February	7:00am : Check out and meet in hotel lobby with driver and interpreter. Depart for Agrial station.			
	8:00am : Welcome and introduction of Agrial station with Mr Bisson who will talk on the vegetable branch of Agrial.			
	8:30am: Visit the station with Mr Sebastien Vautier, Manager of the station, followed by a grower visit.			
	The top-of-the-range vegetable subsidiary of the Agrial Cooperative Group, Priméale is a major player in fresh vegetables. Their product range includes celery, lettuces, carrots, cucumber, leeks, radishes, cabbages, tomatoes, capsicum, melons, turnips, parsnips, beetroot and potatoes.			
	Key facts and figures			
	6 growing areas			
	Year-round marketing			
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	Approximately 950 employees in 2008		
	475,000 tonnes of products marketed in 2008		
	2008 sales: €255m		
	10:00am: Depart Saint-Georges-de-Gréhagne for the West Coast Agrial station in Créances (approx. 1.5 hours).		
	11:30am : Tour the station and a small packaging unit with Mr Christophe Daubard, Manager of the station, followed by a meeting with a grower.		
	12:30pm: Depart for the Saire Valley.		
	1:00pm-2:00pm: Group lunch hosted by Primeale.		
	3:00pm: Visit the Tocqueville/Reville station in the Saire Valley with Mr Christian Gaudfroy, Manager of the station, followed by a visit of a grower in the area.		
	4:30pm : Conclude tour with Primeale and drive to Cherbourg.		
	5:15pm: Check into Hotel.		
7:00pm: Group Dinner.			
	Cherbourg - Paris, France		
Saturday 15	7:45am: Breakfast at hotel.		
February	8:45am: Check out and meet driver and interpreter in hotel lobby.		
	9:00am : Depart Hotel in Cherbourg, and head to Paris (approx. 3.5 hours).		
	12:30pm: Arrive in Paris, find a restaurant/café for lunch.		
	1:30pm : Drive to Hotel and check in/drop off bags		
	2:30pm : Sightseeing in the afternoon; optional bus tour of Paris with Toursud driver.		
	7:00pm : Group Dinner at a restaurant in the city.		
	Paris – Dubai		
Sunday 16	8:30am - 2:30pm (optional): Visit the famous Raspail Organic Markets, Paris.		
February	Follow the throng for their weekly trek for a fix of organic products. People come from all over Paris to make their purchases and enjoy the scene.		
	10:00am : Check out of Hotel (leave luggage at reception/concierge).		
	11:00am : First airport transfer by bus from Hotel to Charles de Gaulle Airport, Paris (approx. 30 mins away).		

	2:25pm-11:59pm: Flight EK074 (QF8074) Paris (CDG) to Dubai (DXB) [MF PD LV]			
	4:00pm: Return to hotel and pick up luggage.			
	5:30pm: Second airport transfer by bus from Hotel to Charles de Gaulle Airport, Paris			
	(approx. 30 mins away).			
	6:00pm : Arrive at Charles de Gaulle Airport and check in at the International Terminal.			
	6:30pm : Have dinner at the Airport.			
	9:15pm – 6:45am (arrives next day): Flight EK076 (QF8076) Paris (CDG) to Dubai			
	(DXB).			
	Dubai – Adelaide			
Monday 17	2:05am – 8:50pm: Flight EK440 (QF8440) Dubai – Brisbane			
February				
	10:25am – 6:40am : Flight EK434 (QF8434) (arrives next day)			
	Dubai – Melbourne:			
	10:55am – 7:35am: Flight QF10 (arrives next day)			
	Dubai – Sydney:			
	9:55am – 6:55am: Flight QF2 (arrives next day)			
	OR			
	10:15am – 7:00am: Flight EK412 (QF8412) (arrives next day)			

7.0 Recommendations

Based on feedback from study tour participants and observations made during the tour, the following recommendations are provided:

- Grower feedback from some participants indicated that some insight into the retail side of the industry operating in the countries visited would have been beneficial. It is recommended that retail site visits with major supermarkets are incorporated in future tours of Germany and France.
- It has been suggested on previous study tours that tour polo shirts might be created which would be worn by growers and the tour leader throughout the tour. Tour polo shirts would assist in building morale and a sense of unity amongst growers of different crops, as well as conveying the professional nature of the tour. They would also ensure the industry is presented in the most positive light when meeting international colleagues and agribusiness professionals. Tour polo shirts would also be an effective marketing tool after the tour when worn by growers in the field, and act as a valuable personal memento for participants.
- Rather than visiting two cooperatives growing under the Prince de Bretagne brand, on future tours there may be some value in seeking meetings with the few growers or researchers operating independently in France (outside of the cooperative model), to compare and contrast the effectiveness of the cooperative model with that of independent vegetable production and marketing.
- The benefits of the cooperative model successfully developed in Brittany and Normandy (namely by the SICA, UCPT, Terres de St Malo and Agrial cooperatives) should be evaluated by the Australian vegetable industry in relation to their applicability and potential implementation here in Australia. At the very least, initiatives to share equipment and utilise centralised packing sheds would assist Australian growers in making efficiency gains and sharing overhead costs, such as upfront capital costs and costs related to machinery. Joint marketing and retailing opportunities are also worth considering and have been implemented successfully in France. The cooperatives in France have also realised a number of benefits in relation to the pooling of resources for export marketing. As well as in France, the cooperative model has also been successfully implemented in other agricultural industries, such as by dairy cooperative Fonterra, which originated in New Zealand in 1871.

There are no other recommendations in relation to this tour. Feedback received from participants was extremely positive.

8.0 Acknowledgements

The 2014 Europe Grower Study Tour, including farm and industry site visits, Fruit Logistica registration and accommodation, was organised by AUSVEG.

Thanks must go to the many growers and business managers that showed participants through their operations and enlightened them with their business skills and knowledge.

The tour was funded by HAL using the National Vegetable Levy and voluntary contributions from industry, with matched funding from the Australian Government.

9.0 Tour participants list

Name	Company	Location
Mr Bruce Adams	Adams Farm	Victoria
Mr Andrew Drummond	Barden Produce	Victoria
Mrs Lina Verrilli	Patlin Gardens	South Australia
Mr Pasquale D'onofrio	Patlin Gardens	South Australia
Mr Jacob Parrish	Bauers Organic Farm	New South Wales
Mr David Beutel	Googa Farms	Queensland
Mr Nabil Ahmad	Abundant Produce	New South Wales
Ms Monika Fiebig	Monika's Organics	South Australia

10.0 Appendices

Not applicable.