

insidetrack

A MAGAZINE FOR THE UK ARABLE SECTOR

www.insidetrack.org.uk

JULY/AUGUST 2017

Brexit

Abstract:

- The need for transitional arrangements to provide some stability post-Brexit is being actively debated, but Ministers are giving confusing messages.
- The process of transposing EU legislation into UK law has started with the European Union (Withdrawal) Bill. Concerns remain about the Government's authority to steer it (and 7 other Brexit Bills), through Parliament in time.
- A report prepared by food policy academics argues that the current agricultural policy vacuum will be harmful for UK food security and that direct payments should continue to reduce food supply volatility.
- The EU is considering its CAP reform options because of its €10-13bn Brexit funding gap. One option is to introduce national co-financing.
- The CLA has filled the policy vacuum with a proposal for Land Management Contracts. The objectives, scope and delivery of this policy seem similar to the current CAP agri-environment schemes.

Transition confusion

As Westminster and EU politicians head off on their summer breaks, it is the Prime Minister and her Cabinet colleagues who will be scratching their heads the most as they consider progress on Brexit and the arrangements that will follow immediately after in March 2019.

It now seems to be generally accepted that there will be some kind of transitional arrangement after March 2019, although Cabinet Ministers appear to be divided as to what form it should take. The consensual word being used by all Ministers, when describing the Brexit process, is 'pragmatic' implying that there won't be a 'cliff edge' in April 2019 and that some form of transitional phase will be agreed but Ministers are taking different lines and talking different time periods.

From a farming viewpoint, a de-facto transitional period for direct payments has already been given with a Government guarantee that they will be paid until the end of this Parliament. However, the conditions that will apply to EU migrant labour and the terms for agricultural trade, remain uncertain. An abrupt change in agricultural tariffs in 19 months' time and reduced EU immigrant labour would have a major impact. While arable farms may not feel threatened directly, the impact on the poultry, pig and livestock sectors is already being felt and these are key markets for home-grown cereals.

Inside	Page
Brexit <i>Transition confusion • (Great) Repeal Bill in Parliament • A National Commission for Agricultural Policy? • Brexit shapes next CAP reform • CLA farm policy proposal</i>	1
Crop Markets <i>USDA – global supply and demand • Oilseeds markets commentary • UK arable update • Potatoes – rain rescues British crop • Sugar beet – new prices announced • EU-Japan trade deal</i>	4
UK Surveys and Reports <i>Chokepoints in global food trade • AHDB planting and variety surveys • UK soil nutrient balances • CAAV land occupation survey • UK food chain total factor productivity</i>	5
Crop Protection <i>ChemChina completes Syngenta takeover • Endocrine disruptors • Neonicotinoids study on bees • Glyphosate saga continues</i>	7
Policy & Environment <i>EFA pesticides ban – no further details • Wild bird indicators • Carbon footprint • Organic reforms – provisional agreement</i>	8
Data <i>Crop prices • Spray prices – selected products • Fertiliser prices – selected products • Macroeconomic Data</i>	9
In Brief... <i>Key dates for coming weeks • UK tractor sales up • EU-Canada (CETA) trade deal • EFRA committee chair re-appointed • Consultations relevant to arable sector</i>	10



Professional Advisors to Rural Business and on the Environment

Independent Agricultural and Rural Consultants

- Expert Opinion
- Rural Planning
- Renewable Energy
- Farming, Business & Estate Management
- Crops & Livestock
- Trees & Forestry
- Environment & Conservation
- RPA Matters

To find an independent Agricultural and Rural Consultant contact BIAC:

BIAC, Portbury House, Sheepway, Portbury, BS20 7TE

Telephone: 01275 375559

Email: info@biac.co.uk

Website: www.biac.co.uk



Liam Fox has said that any transitional arrangement must end before the next general election, seemingly ignoring the possibility of an election before March 2019. He seems to be suggesting a 24-month transition period but said it must be “time-limited”, based on concerns that a longer transitional period could be used to stop Brexit by any incoming government elected in 2022. Chancellor Philip Hammond had previously said that a transition period should be dictated by “economic logic”, but has most recently stated that such a period “must end” by 2022.

The next question is what form the transition should take. Business and farming lobby groups argue that the UK should remain entirely in the Single Market during a transition period but this has been rejected by Ministers, such as David Davis, who said that we should leave the Single Market and Customs Union in 2019. Most business groups are hoping for a transitional arrangement like that which exists in European Economic Area (EEA)/European Free Trade Area (EFTA) countries but the Government appears opposed to this on ideological grounds.

In the end, the EU may well be the most influential party in determining any future transition. Its Brexit negotiating framework is clear that if part of the EU’s Single Market legal “acquis” – its body of common rights and obligations – is prolonged at all after Brexit, the guidelines say that all “existing regulatory, budgetary, supervisory and enforcement instruments and structures” must apply. Some Ministers still believe that they can cherry-pick bits of the EU that they like (e.g. free movements of goods and capital) and leave the rest (free movement of people).

It will be harder for Ministers to negotiate an ‘a la carte’ arrangement in the short time available than take up a fixed price menu, such as an EEA/EFTA, which is known and understood. But, contrary to the Prime Minister’s ‘no deal is better than a bad deal’ proclamation, farming and agri-food businesses needs a transition deal soon to plan for the future. No deal is the worst possible option. And we only have 19 months left....

(Great) Repeal Bill in Parliament

The European Union (Withdrawal) Bill (EU Bill), formerly referred to as the Great Repeal Bill, was published on 13th July 2017 and is the first of eight major Bills needed to enact Brexit.

The EU Bill is formed of 19 clauses and 8 schedules. The Bill does three main things:

1. Repeals the European Communities Act 1972.
2. Brings all EU laws onto the UK books.
3. Gives ministers power to make secondary legislation without the detail being fully debated by Parliament.

The plan is for the bill to complete its passage through Parliament well before March 2019, but the bill will come into force “from the day we leave the European Union”, leaving open the possibility of an extension. The bill is likely to have a second reading in the Commons after recess before going to the Lords.

Amendments can be made to the Bill. Both the Commons and the Lords will need to approve the Bill, with any amendments, before it can be passed. This is likely to cause many problems for the Government (as discussed in the June edition of *InsideTrack*). Once the bill becomes an Act, the Government will start to introduce the secondary legislation it needs.

The big question remains whether a weak Prime Minister and a weak Government will be able to successfully shepherd all this controversial legislation through Parliament in the limited time available.

A National Commission for Agricultural Policy?

The Government should create a new National Commission on Food and Agricultural Policy to prepare for Brexit, according to a report prepared by academics from the Universities of London, Sussex and Cardiff.

Entitled ‘A Food Brexit: time to get real’, the report argues that Brexit is being negotiated in a food and agricultural policy vacuum with “with no goals, no leadership, and eviscerated key ministries.” It stresses that:

- The Government seems to think that “*an export drive will suffice for farming*” but it will not.
- The entire UK food system is dependent on migrant labour. Ministers think that technology will replace the vast army of migrant labour who work in agriculture and food, but it won’t.
- Whatever happens, the CAP will still be vitally important to UK food and farming. If the UK negotiates a ‘soft’ Brexit, the CAP will be very important for the UK agri-food trade. “*If there is a ‘hard’ Brexit, and the UK meets high tariffs and switches, for example, to a combination of US, African, Latin American and Eastern Mediterranean sourcing, EU agriculture will continue to influence, and maybe even dominate, global food markets*”
- What happens to farm support after 2022? “*The subsidy question exposes the shameful inequalities within the UK food system. Primary growers get a tiny percentage of what consumers spend on food*”

The lead author of the report, Professor Tim Lang, has previously been a critic of the CAP and farm support but now believes that the removal of Pillar 1 direct payments “may be popular with some urban interests and certainly with neo-liberals, but it raises concerns about the impact on primary food production. Lang et al claim that the CAP’s mechanisms are better than the post-Brexit alternative of boom and bust in agriculture. “If there aren’t subsidies to sustain the viability of British farms when food prices are volatile then many farms will go out of business, urban food prices will rise, and food security for low income consumers will be affected. It is hard to see any alternatives to production subsidies as a means to stabilise supplies and prices. The only alternative might be for food manufacturers and retailers to guarantee forward prices to their suppliers, but they have never indicated any willingness to do so.”

The authors contend that if UK agricultural markets are radically deregulated, and all production subsidies ended, the UK will once again become chronically prone to volatilities of supplies and prices. There are good reasons for retaining some Pillar 1-type subsidies in the UK post-Brexit in order to retain capacity and enhance food security, but the authors believe that the payments should be radically re-directed towards smaller producers and to fruit and vegetable production.

The report states that enhanced food security should be a post-Brexit goal, in which case the UK will require:

- Clear statements from HM Government, the Wales Assembly Government, Scottish Government and Northern Ireland Assembly about the future of subsidies for farm, food and fisheries in the long term (beyond 2019 and 2022)
- Consideration of a new subsidy regime such as the UK’s former ‘deficit payments system’ which reduced the volatility of supplies and prices without generating unsustainable surpluses
- A shift of subsidies from foods with an undesirable nutrition

impact, to more nutritionally desirable horticultural production

- That any agricultural subsidies go to those most in need rather than those who need them least.

Brexit shapes next CAP reform

The EU will have a funding gap of €10-13 billion because of Brexit, according to a new EU Commission report: 'Reflection paper on the future of EU finances'.

Published on 28th June, the paper looks at options to manage the Brexit black hole other than just slashing budgets across the board, including raising more money from Member States. One possible option is increasing the 1% Gross National Income limit from 1% to 1.1%; or alternatively plugging the Brexit gap by 50% cuts to budget lines and 50% in extra financial contributions from Member States.

The German Commissioner responsible for Finance and the Budget, Gunther Oettinger said that *"major programmes such as the CAP will not be automatically spared"* ... but there are unlikely to be *"any kind of wide sweeping cuts ... in the area of agriculture"*.

The options in the paper will feed into the start of the EU's budgeting process (the next Multi-Annual Financial Framework) next year but most of the options assume a lower CAP budget. One option might be to *"target direct payments more effectively ... for marginal areas and the poorest farms"* – assuming more capping of direct support for large farms. The text also floats the introduction of *"a degree of national co-financing for direct payments in order to sustain the overall levels of current support"*, while *"risk management tools could be envisaged for dealing with crises"*. The paper says that farmers should be *"encouraged to invest in new technologies and environmental protection within rural development policy through positive incentives on the basis of contracts"*.

The options depend on how the overall EU budget is reconfigured to cope with Brexit. Five EU financing options are discussed and the implications for the CAP are set out as follows:

1. **Carrying on as before:** Better targeted support for farmers under special constraints (e.g. small farms, mountainous areas and sparsely populated regions) and risk management tools for all farms. Investment in rural development (particularly agri-environmental measures).
2. **Cutting the overall EU budget:** Support only for farmers under special constraints (e.g. small farms, mountainous areas and sparsely populated regions). Risk management tools for all farms.
3. **Some countries pay more, some pay less:** as for 1
4. **Radical design of budget framework:** Reduced direct payments. Focus on farmers under special constraints (e.g. small farms, mountainous areas and sparsely populated regions). Agri-environment-climate actions and risk management tools for all farms
5. **Increase the overall EU budget:** More money for the CAP.

All options suggest less money for the CAP except for Option 5. The EU Regional Policy Commissioner, Corina Crețu, has proposed another option - national co-financing of direct aid. This could mean that direct payments would follow the Rural Development/Pillar 2 model of financing which has led to the UK having the lowest level of Pillar 2 payments per ha in the EU (due to the Government being unwilling to pay its share).

CLA farm policy proposal

Published last month, the Country Land and Business Association (CLA) set out its proposal for Land Management Contracts (LMCs) to form a central part of a post-Brexit Food, Farming and Environmental Policy framework. The proposal also included two other strands;

- **Profitable Farming** – encompassing skills, advice, capital grants, loans, succession schemes, food promotion and resilience funds.
- **Rural economy** – business advice, diversification, capital grants, tourism and marketing.

The CLA advocates moving "away from the dependency on support and subsidies to a more transparent agreement where any payments are for tangible activities and outcomes." In other words, it does not favour a continuation of direct payments (similar to BPS). Instead, the CLA focuses heavily on agri-environmental issues and proposes that the LMC outcomes should be:

- Safeguarding and increasing carbon storage to help meet international carbon targets.
- Mitigating or reducing flood risk.
- Providing opportunities to improve health and wellbeing through providing access to good quality green spaces and land based recreation facilities.
- Managing and improving water quality and availability.
- Creating better connectivity of habitats and species.
- Maintaining the distinctiveness of our places, historic landscapes and heritage.
- Managing soil structures to maintain productive capacity of land for future generations.
- Delivering high standards of food safety and traceability.
- Leading the world in driving high health and welfare standards.

The CLA says that the activities and outcomes of a contract will be selected by the land manager, but will reflect the needs and priorities of the local area. Some areas have potential for carbon storage, or high landscape value, while other areas are uniquely placed to deliver specific conservation intervention. The land management contract should be locally adaptive, using existing and new evidence from mapping, to identify the priorities to ensure that the greatest impact is delivered. In many ways, this sounds similar to the targeting of priorities that applied under HLS applications under the old Environmental Stewardship Scheme.

The LMC will state clearly what the land manager is required to deliver with transparent terms and measurable impacts. As with any contract, the CLA points out that the quality of delivery will be paramount, which will require the design and implementation of a sensible and appropriate inspection system, to measure the impact. This may not be as easy as it sounds.

Importantly the CLA acknowledges that transitional arrangements will be required and this time will be needed to minimise uncertainty. The process of policy design will take some time, and therefore, it accepts that the existing support system should remain in place and funded for 5 years.

Whilst the CLA's proposals overlap somewhat with those proposed by other organisations (e.g. NFU, TFA), there are also differences. Given current circumstances, there is a once-in-a-generation opportunity for industry to shape agricultural policy. Agriculture's voice needs to be clearly heard. If there was ever a time for farming to speak with "one voice" and to agree on an aligned set of policy proposals to take to government, surely it is now?

Crop Markets

USDA – global supply and demand

As we enter the new crop marketing year, the main focus of USDA projections shifts to 2017/18. Although 2017/18 output estimates are up 7Mt on last month, output is down by about 62Mt on 2016/17 as a result of lower plantings due to suppressed prices which were commented on last month.

Total global grains supply & demand at 12 July 2017 (Mt)				
	Output	Trade	Total use	CL stocks*
2015/16	2,467.88	376.65	2,439.40	607.85
2016/17 est.	2,600.25	421.53	2,568.85	639.25
2017/18 June forecast	2,530.90	408.06	2,563.98	602.72
2017/18 July forecast	2,537.93	407.76	2,566.16	611.03

*closing stocks Source: USDA

Lower worldwide wheat supplies forecasted

Global wheat supplies are forecasted down in 2017/18, mainly due to lower production in US, Australia, China and the EU. In the US, wheat production is lowered due to drought in some areas. It is also set to harvest its smallest spring wheat crop in 15 years. When coupled with their very small winter wheat crop, this means the US is not going to have a massive surplus. Last year they harvested 63Mt, a much bigger crop than this year's forecast of 49Mt. Curiously, their exportable surplus might not differ much from last year's 28Mt, with the USDA currently expecting 27Mt this year. This is largely because of the decline of stock levels. EU wheat production has been revised down 0.8 Mt to 150Mt. This is mainly due to smaller yields from France and Spain.

However, these decreases have been offset by increases elsewhere. Most notably, Russian wheat production is projected to rise by 3Mt to 72Mt. *Lower wheat supplies should help UK prices in the coming months, and UK farmers should be able to capitalise on this as long as dry weather does not affect yields significantly.*

Wheat supply & demand at 12 July 2017 (Mt)				
	Output	Trade	Total use	CL stocks*
2015/16	736.98	172.87	711.83	242.84
2016/17 est July	754.31	181.64	739.11	258.05
2017/18 June forecast	739.53	178.55	734.77	261.19
2017/18 July forecast	737.83	178.42	735.28	260.60

*closing stocks Source: USDA

Oilseeds markets commentary

USDA forecasts slightly higher oilseeds output versus last month. Global production is estimated at 573.9Mt for 2017/18, up 0.9Mt on last month, driven by increased production of sunflowers in Ukraine and soybeans in China.

Oilmeals output is also up 1Mt to 334.4Mt. Soybean imports have been rising in China with 2016/17 estimates (92Mt) up by 2Mt on last month, and imports are forecast to rise to 94Mt in 2017/18, with some of this going towards increased stocks. For OSR, Australian production has been revised down. *This coming on top of production declines in Germany, should support UK farm-level prices.*

USDA oilseeds supply & demand at 12 July 2017 (Mt)				
	Output	Trade	Total use	CL stocks*
2015/16	521.11	153.17	446.09	90.01
2016/17 est July	571.45	168.42	470.25	105.92
2017/18 June forecast	573.03	172.25	486.83	103.50
2017/18 July forecast	573.94	172.89	488.37	104.54

*closing stocks Source: USDA

UK arable update

Some of the winter barley harvest began at the start of July (and in some cases the last week of June). This makes the start of harvest as much as 2-weeks early for many farms thanks to the hot sunny weather.

The start of the OSR harvest followed soon after too. That said, progress has been hampered by recent rainfall. Clearly it is early days yet, but initial reports have been rather good in terms of both yields and quality. For barley, bushel weights and yields appear high. Unsurprisingly, the highest yields are coming from heavier soils. Harvest commentary from other European countries are also reporting early harvests.

Old crop wheat futures markets have finished, and so the next one, available for November, is currently at £146/t. Whilst the early harvest brought prices down for early delivery, this is a small adjustment as grain availability starts to rise. It is worth bearing in mind that the overall direction of wheat prices has been gradually upwards since the spring and markets have been at contract highs in July.

When marketing wheat, remember that the UK now grows a surplus of milling varieties and a shortage of feed. This is easily resolved if the milling quality is poor, as more will find its way into the feed-bin and milling premiums will be small. Finding added value from milling varieties will, from now on, probably involve greater risk so be absolutely sure about what is being sold and what the specification on the contract is. Moisture levels and in-store grain temperature should be fully understood. This is because even if the grain is sufficiently dry and cool ahead of sale, any degradation in-store could lead to a rise of mycotoxins. If these are picked up at the point of delivery and rejected, it could create an additional secondary haulage charge greater than the milling premium itself (which will also be lost).

We remind you that the declining wheat stocks trend mentioned above, has been, and continues to happen around the world. This is apart from China, whose wheat stocks have risen so much in the last 3 years, they now own half of all global wheat stocks; not bad for a country that trades very little wheat (in or out).

Potatoes – rain rescues British crop

Well-timed rain appears to have saved the UK potato crop, allowing crops to develop and perhaps deliver at least average yields.

Low early crop prices suggest that the market might be preparing for a larger crop than it has had in the last two years, with most Maris Peer prices below £100/tonne. The low early prices follow an unexpected collapse in values at the end of 2016/17, with prices halving between March and the beginning of July. It appears that buyers were buying stocks earlier in the season to cover their needs and to avoid late season price hikes.

The AHDB estimates that GB potato plantings are at 121,000 hectares, up 4% on last year and the largest area since 2014. Although, the UK is one of the world's largest importers of potato products, it only requires around 5.4Mt for its own processing and packing needs. Average yields above 45 t/ha will lead to a surplus and put pressure on prices.

There are still doubts about the Northern France and Belgian crop, which was affected by very dry conditions up until late June. Early crop yields are dramatically lower, but recent rain has helped maincrops to recover. If there is a deficit of French and

Belgian potatoes, there could be an opportunity for British exporters to ship to continental processors.

Sugar beet – new prices announced

British Sugar and the National Farmers Union have agreed on prices for the 2018 sugar crop. The headline point is a small increase in the basic price by 50p per tonne to £22.50 per adjusted tonne.

As with the 2017 crop, growers can choose to contract at these prices for just one season, or can lock-in' under a three-year deal. The same bonus arrangements as this year will continue for the 2018 crop as well. To recap, growers on a one-year contract will receive 10% of the EU sugar market price once this rises above €475 per tonne. Those opting for the three-year deal get 25% of the value above the threshold. The bonus is capped if the EU sugar price reaches €700 per tonne. For context, the current EU sugar price is around €495 per tonne – this would provide a small bonus to growers. However, for the 2017 crop (i.e. that in the ground now), the calculation is based on the year's average price only starting in October.

EU-Japan trade deal

On 6th July, the EU and Japan announced an agreement in principle on the main elements of an EU-Japan Economic Partnership Agreement. Phil Hogan, Agriculture Commissioner, described the deal as a big win for Europe claiming that it is “the most significant and far-reaching ever concluded in agriculture”.

The deal is claimed to be the biggest bilateral trade agreement ever struck by the European Union, representing around a quarter of global economic output. The desire to achieve a deal has been given impetus by the US withdrawal from the Trans-Pacific Partnership at the outset of the Trump presidency. However, although a 'political deal' has been announced, there is still a lot of detail that needs to be decided on. Furthermore, the final agreement also needs to be ratified and this process almost scuppered the EU-Canada (CETA) deal last year.

In the March edition, we reported that Japan imports around 85% of its wheat, 90% of its barley and virtually all of its maize requirements. So, a deal such as this would present significant opportunities. However, from a UK perspective, the big elephant in the room is Brexit. The EU-Japan deal may not come into force until after the UK has left the EU. How easy will it be for the UK to agree a separate trade deal with Japan? That is difficult to answer without knowing what access the UK (and Japanese automotive companies that are based here) will have to the EU Single Market upon Brexit. Issues such as this highlight the challenge that the UK will have in the coming years to establish trade deals on its own accord.

Whilst it is true that the UK is the world's 5th largest economy, it accounts for around 3.5% of global GDP. In comparison, the EU-27 accounts for around 18%. The EU-27 also has a population of 450 million people, nearly seven times that of the UK (65 million). Viewed in this context, the EU has more bargaining power and is arguably better-positioned to secure favourable trade deals.

That said, the UK needs to ensure that it continues to have free trade access to markets that were secured under the auspices of the EU trade agreements. This is another reason why the UK is likely to pursue a transitional arrangement (implementation phase) with the EU. In so doing, it could continue to avail of existing EU deals whilst putting in place the structures to ensure a smooth transition to the longer-term relationships that it plans to have with EU and non-EU countries from the 2020's onwards.

UK Surveys and Reports

Chokepoints in global food trade

Chatham House recently published a highly informative report on the exposure of the global food supply chain to key infra-structural chokepoints. It highlighted that three crops – maize, wheat and rice – account for about 60% of the global food energy intake and that soybean accounts for 65% of the global protein feed supply. It also estimated that the global transport system moves enough of these crops to feed approximately 2.8 billion people each year. The report also noted the key role of transport in supporting the application of 180 million tonnes of fertiliser needed to support the growing of these crops.

The study identifies 14 chokepoints which are critical to global food security. As the following table illustrates, if trade through any of these were disrupted, it could have major implications for global (and UK) arable markets. At an aggregate level, the Panama Canal and the Strait of Malacca see the most significant annual throughput of the four strategic crops as they are key gateways linking Western and Asian markets.

Overview of key food trade chokepoints

Chokepoint	Type	Comments
Panama Canal	Maritime	Responsible for 75% of Japan's maize and wheat imports; 20% of soybean exports
US Gulf Coast ports	Coastal	Major outlet for US exports, susceptible to natural disasters (e.g. Hurricane Katrina)
US inland waterways and rail network	Inland	Waterways carry around 60% of US exports of 4 key crops (13% of global total)
Brazil inland road network	Inland	Handles 33% of global soybean exports and 18% of international maize trade
Brazil's southern ports	Coastal	Responsible for almost 25% of global soybean exports.
Strait of Gibraltar	Maritime	Handles 80% of Saudi Arabia's wheat imports and circa 14% of global rice imports
Dover Strait	Maritime	Caters for around 5% of wheat and soybean trade, major access point to Rotterdam.
Black Sea rail network	Inland	60% of Russian and Ukrainian grain exports (12% of global total) rely on this network.
Black Sea ports	Coastal	Exports 26% of wheat, 18% of global maize. Handles 15% of fertiliser exports
Turkish Straits	Maritime	A fifth of global wheat exports pass through this strait.
Suez Canal	Maritime	Over 15% of wheat and rice trade passes through here each year
Strait of Bab al-Mandab	Maritime	Nearly 15% of world wheat trade and circa 18% of rice trade transits this area
Strait of Hormuz	Maritime	10% of global rice trade passes via here
Strait of Malacca	Maritime	Over 25% of soybean and 20% of rice exports transit through this area.

Source: Chatham House

The report highlights three major types of hazards, namely, weather and climate, security and conflict and institutional, and notes that all but one (Gibraltar Strait) has seen a closure of interruption in the past 15 years. Risks are also increasing driven by growing dependency on the chokepoints for trade, climate change and an under-investment in infrastructure. Chokepoint failures threaten to compound market fragility in terms of higher costs, longer delivery delays and supply chain disruptions whilst also contributing to increased volatility in arable markets.

Concern was also raised about the poor understanding and management of chokepoint risks which are often overlooked in strategic food security assessments. The most obvious exception

to this was China which has been investing heavily in infrastructure across the world in a bid to secure its food supplies.

The report outlined a series of recommendations which centred on:

- 1. Integrating chokepoint analysis into mainstream risk management and security planning** – includes conducting national and sub-national risk assessments.
- 2. Invest in infrastructure to ensure future food security** – involves establishing taskforces on climate compatible infrastructure which give a long-term cross-sectoral perspective (and sit outside of parliamentary cycles). It also advocates diversifying food supply sources.
- 3. Enhance confidence and predictability in global trade** – again advocating a diversified production base.
- 4. Develop emergency supply-sharing arrangements and smarter strategic storage** – including collaborative arrangements to store grain in destination markets, beyond the location at which chokepoints could interrupt supply.
- 5. Build the evidence base around chokepoint-risk** – encompasses deploying real-time food trade data, climate impact modelling, and infrastructure resilience planning.

This study offers very useful insights into the infrastructural risks associated with international trade and rightly highlights the growing threats posed by conflicts, natural disasters and institutional policies (e.g. export bans). From a UK perspective, there are a number of takeaways that policy-makers should note. Continued infrastructural investment is vital and risk mitigating strategies should be formulated for key chokepoints across the UK. The study also highlights the risks posed by adopting a cheap food policy and effectively outsourcing food supply to other countries. Diversification was a strong theme running through the report and the ability to meet food supply needs from an internationally competitive domestic supply base should be a priority. For arable businesses, it is important to monitor any disruptions associated with these chokepoints as they are likely to have a significant bearing on price, not just for outputs but for key inputs such as fertiliser as well.

The full report can be downloaded via:

<https://www.chathamhouse.org/publication/chokepoints-vulnerabilities-global-food-trade>

AHDB planting and variety surveys

On 14th July, the AHDB reported its Planting and Variety survey findings, for harvest 2017, which are based on responses from approximately 3,000 farmers across Britain. It shows increases in spring barley and oats area, but declines in wheat, winter barley and OSR.

GB wheat area is down 3% on 2016 and is the fourth consecutive annual drop. This is mainly due to declines in eastern regions of England, where black-grass remains challenging. When planting decisions were being made, UK wheat prices were also relatively low and this would have influenced growers' choices.

Estimated area of crops planted in Great Britain for harvest 2017 ('000 ha, % change on Defra 2016 figures)			
	2017 harvest estimate	2016 harvest area	% change
Wheat	1,761	1,815	-3%
Winter barley	428	432	-1%
Spring barley	725	668	+9%
Oats*	151	139	+7%
Cereals total~	3,024	3,053	-1%
Oilseed rape*	553*	579	-5%
Total	3,577	3,632	-1.5%

* OSR and oats data for Wales not yet available; ~Excludes 'other cereals' (rye etc.) Source: AHDB

In terms of varieties, Nabim Group 1 and 2 account for 40% of

GB wheat area, which is up by 31% on 2016 and the highest since the variety survey started in 2006. Group 1 and 2 varieties are mainly up due to the introduction of new varieties which provide higher yields and offer greater flexibility to growers.

Area of wheat planted for harvest 2017, broken down by Nabim Group ('000 ha, % area in each region planted to Nabim Group)

Region	2017 estimate	Nabim Group 1	Nabim Group 2	Nabim Grps 3&4	Other
North East	69	12%	13%	68%	6%
North West	30	20%	13%	61%	6%
Yorks	233	16%	12%	66%	6%
East Midlands	321	23%	14%	56%	8%
West Midlands	154	32%	9%	57%	2%
Eastern	453	27%	16%	50%	7%
South East	213	51%	16%	26%	7%
South West	160	38%	12%	42%	8%
South Scotland	87	2%	7%	75%	17%
North Scotland	18	0%	1%	85%	14%
Wales	23	14%	5%	81%	0%
GB 2017	1,794	27%	13%	53%	7%
GB 2016*	1,794	24%	7%	63%	6%

Source: AHDB Planting and Variety Survey *AHDB Variety Survey 2016

Spring barley area (725Kha) has increased 9% on last year, and has once again benefited from farmers switching to spring cropping to mitigate black-grass pressures. It is also being used as a replacement for failed OSR crops in the autumn. This is the third year in which spring barley area has increased. Winter barley area is down 1% at 428 Kha. Malting varieties account for 50% of the barley area, a 3-percentage point increase on 2016.

Oilseed rape (553Kha) area has declined by 4% and is the 5th consecutive year of a decrease. This has mainly been attributed to problems with controlling cabbage stem flea beetle as well as unfavourable drilling conditions. These issues have been particularly pronounced in the East of England where declines are estimated at 24%. The most common OSR varieties planted were Elgar and DK Extrovert both with an 11% share.

England and Scotland have a combined total of 151Kha of oats (up 14% on 2016). The Scottish area of 35Kha is the largest area since 1989. England's total area of 116Kha is the highest since 2013. The rise is similar to spring barley with more growers favouring spring cropping to combat weed problems, manage workloads and address challenges around soil and fertility.

UK soil nutrient balances

The challenges around soil health and fertility were illustrated by UK soil nutrient balance data published by Defra on 27th July. They show the balance of nutrients in the soil during 2016.

The results found that there was a surplus of 91 kg/ha of Nitrogen in the soil which is a 3.4 kg/ha (4%) increase when compared to 2015. However, this is a 20 kg/ha (-18%) reduction vis-à-vis 2000 which is continuing a long-term downward trend. The main drivers of the increase between 2015 and 2016 were a reduction in overall offtake (mainly via harvested crops) whilst inputs remained virtually unchanged.

For phosphorus, there was an estimated surplus of 6.6 kg/ha for 2016, an increase of 1.4 kg/ha (26%) on 2015. But, once again, 2016 levels are 3.4 kg/ha (-34%) lower than in 2000. The main drivers for the 2016 were similar to that of nitrogen.

CAAV land occupation survey

The latest Central Association of Agricultural Valuers' (CAAV) Annual Survey of Tenanted Land in England and Wales shows a significant increase in the average length of Farm Business Tenancies (FBTs).

The survey which covered around 88Kha in 2016, found that the average FBT let was for four and half years, eight months longer than in 2015 and nine months longer than the 8-year average. The increase is notable, but as the results only cover one year, it is premature to say it is part of a longer-term trend.

The average covers all arrangements from seasonal grazing lets through to fully-equipped farms with dwellings. According to the survey, holdings which have a house and buildings are typically let for more than 14 years, with larger, better equipped holdings generally being let for the longest terms. The study estimates that 94% of FBTs which came to an end were re-let. Furthermore, over 85% of 1986 Act Tenancies which finished without a successor were re-let as FBTs. The area of land in the tenanted sector increased slightly (476 acres), but is somewhat lower than in previous years. Annual increases during 2012-2015 surpassed 2,000 acres.

In Scotland, only 35% of Agreements which came to an end in 2016 were re-let, with the remaining either taken back in-hand, sold or entered into contracting agreements or other arrangements which gave owners more control. During 2016, the area of let land in Scotland fell by about 28,000 acres, over the past five years it has reduced by more than 87,000 acres. These results are quite negative for the Scottish land market generally.

UK food chain total factor productivity

On 27th July, Defra released its total factor productivity (TFP) estimates for the food chain (i.e. downstream from the farm). TFP represents how efficiently a sector (e.g. food and drink manufacturing) turns inputs into outputs. It provides a comprehensive picture of productivity growth and the competitiveness of companies operating in the food chain.

This report focuses on four sectors namely, manufacturing, wholesale, retail and catering. The chart below also includes the overall food chain and the wider economy for comparison.

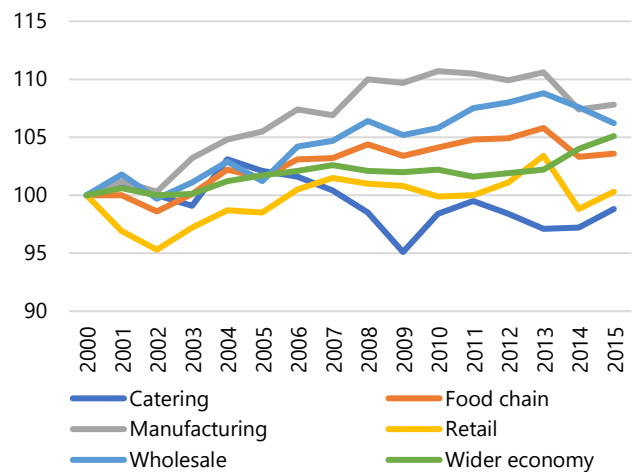
Since 2000, the manufacturing sector, with a Gross Value Added (GVA) of at £27.8 billion in 2015, performed relatively well, although productivity is down on levels witnessed during 2010 to 2013. This sector is of particular interest to UK farmers, as it offers insights on how much added value is being placed on products when they leave the farm-gate. In 2015, total factor productivity in food and drink manufacturing increased by 0.4 % and in the last 10 years has shown an average annual increase of 0.2%. During 2015, the volume of both inputs and outputs grew, but outputs increased more than inputs (1.2% and 0.8% respectively). From 2003, the volume of inputs has consistently been lower than outputs, which help to boost productivity.

The wholesale sector (GVA £11 billion) also performed quite well but has declined since 2013. Both retailing (GVA £30.9 billion) and catering (GVA £31.6 billion) have struggled. This has meant that the performance of the food chain generally, with a GVA of £101 billion, has been lacklustre since 2000 and is now falling behind the wider economy.

This is concerning, especially given the productivity in the UK generally is falling behind its European counterparts. As previous editions have reported, the productivity of UK agriculture has also been lagging behind its peers. Addressing the productivity chal-

lenge (i.e. producing more output with the same/fewer inputs) is increasingly becoming centre-stage, especially given the future direction of UK agri-food policy.

Total Factor Productivity in the Food Chain (2000 – 2015)



Source: Defra

Crop Protection

ChemChina completes Syngenta takeover

On 28th June, ChemChina announced that it had completed the \$43 billion takeover which is the largest overseas acquisition ever undertaken by a Chinese firm, thus completing a process which began in February 2016.

To gain regulatory approval, ChemChina has pledged to sell part of Adama's pesticides business which it also controls. It is understood that Syngenta will remain a standalone company and will continue to be run by the existing management team.

Sources in Asia mention that ChemChina is particularly keen on developing Syngenta's seed business, so it is likely to form a core tenet of its growth strategy in the coming years. Currently, seeds account for around 20% of Syngenta's global sales and the company is a distant third behind Monsanto and DuPont in the global seeds market.

From a UK perspective, Syngenta is already a major player in the seeds sector. What happens to Adama's operations will be of most interest. European approval for the deal was contingent on ChemChina divesting a significant proportion of Adama's pesticides and PGRs business amid concerns amongst farmers that a lack of competition would push up prices.

Endocrine disruptors

On 4th July, EU Member States voted in favour of the European Commission's draft criteria to define endocrine disruptors with regards to Plant Protection Products (PPPs).

These criteria are based on the World Health Organisation (WHO) definitions which identify known and presumed endocrine disruptors (chemicals that affect hormones). The criteria also stipulate that the identification of an endocrine disruptor should be carried out by considering 'all relevant scientific evidence including animal, in-vitro or in-silico studies, and using a weight of evidence-based approach'. The same criteria will be adopted for biocides. The 'hazard-based' approach of the overall Pesticides Regulation will be continued. This means that substances are banned on the basis of hazard, and do not consider the level of exposure to the substance.

The agreed text will now be submitted to the Council and the

European Parliament and they will have three months to examine it before the Commission finally adopts it. The text will enter into force 20 days after its publication in the Official Journal and be applicable six months after this.

The European Crop Protection Association (ECPA) has called on the Council and EP to veto the proposal, describing the criteria as “fundamentally flawed” and that the criteria “provide no additional protection for the health and the environment and only serve to have a disproportionate and discriminatory impact on European farmers”. However, the French Government, whilst voting in favour of the Commission’s proposal, has promised tougher national controls on Endocrine disrupting chemicals (EDCs) and is reported to be planning national bans on EDCs as soon as their hazardous nature becomes established.

Such stances reflect the intense debate that has been taking place across the EU and illustrate the degree of difficulty in getting regulatory approval. Whilst all of this is quite technical, it is very important for the EU and the UK farming sector. Studies have suggested that up to 30 currently-approved pesticides could fail to gain reauthorisation due to the imposition of these new criteria.

Neonicotinoids study on bees

Recent research conducted by the Centre of Ecology and Hydrology (CEH) has concluded that neonicotinoids are harmful to bees. The study was funded by Bayer and Syngenta and although they do not disagree with the findings, they have criticised the conclusions which the CEH has drawn. This study is the first large, field-scale experiment to examine the effect of neonicotinoid seed treatments on honey and wild bees, and is therefore viewed as being important.

The research was undertaken in the UK, Germany and Hungary, monitoring three bee species. The study found that exposure to neonicotinoid-treated OSR reduced the ability of the honey bees to survive the winter in the UK and Hungary, no harmful effects were found in Germany. It is unclear why this is the case and could be partly attributable to the healthier state of hives generally seen in Germany and the fact that bees also had access to a more diverse range of wildflowers.

Both Bayer and Syngenta are disputing the authors’ conclusions and questions whether adverse effects of the seed treatment can be definitively determined from the study. Bayer has queried why, in a paper focusing on “country-specific effects”, the data used to suggest that there is a potentially negative impact, was aggregated data from three countries. It further claimed that having replicated the study’s data, there was “no correlation between the peak amount of neonic residue found in the nest and resultant queen numbers” when examining the UK on the one hand and Germany and Hungary on the other.

However, the authors are standing by their findings, which have been published at a critical time for the industry. The EU is currently reviewing the 2013 ban and is considering an extension which would restrict the use of neonicotinoids on all outdoor crops, including cereals, potatoes, sugar beet, fruit and vegetables. The neonicotinoids ban has already had a significant impact on the UK OSR crop area, as previously reported.

Glyphosate saga continues

EU Member States have held, yet more, technical discussions on the plans to reauthorise glyphosate a further 10 years (as opposed to the standard 15 years). Further discussions are planned for the autumn ahead of an end-of-year vote when the current licence expires.

The EU Commission has clearly stated that Member States

need to make the final decision. Previously, Member States have abstained from tricky political votes, leaving the EU Commission to decide (and take the ensuing criticism). This time, the EU Commission is digging its heels in, stating that it will not re-authorise glyphosate unless there is the support from a qualified majority of Member States.

Policy & Environment

EFA pesticides ban – no further details

Following last month’s article, there is still no further detail on the rules covering how the ban on Plant Protection Products (PPP) is to be enforced on Nitrogen Fixing Crops for EFA. Member State governments are awaiting EU Commission guidance on how the new restrictions are to be applied. With Brussels tending to shut down for most of August, the detail may not be available until well into the autumn planting period. Most producers will have decided their crop rotations for 2018 some time ago.

Wild bird indicators

DEFRA has published its latest report on wild bird populations (see <https://www.gov.uk/government/statistics/wild-bird-populations-in-the-uk>). Although this may not be of immediate interest to everyone in UK farming, the Government has long taken bird populations to provide a good indication of the broader state of wildlife in the UK. Therefore, these sorts of measures may well be the type of thing the farming industry is measured against under a post-Brexit farming policy.

In 2015 (the latest year of the statistics) the UK farmland bird index was less than half its 1970 value. The majority of this decline occurred between the late seventies and the eighties. More recently decline has continued but slowed; the smoothed index decreased by 8% between 2009 and 2014. *Looking just at the last couple of years, the index appears to show an ‘uptick’ in numbers. It is not yet clear whether this is just statistical ‘noise’ or whether the various policies put in place to halt species decline are starting to have an effect.*

Carbon footprint

The UK’s carbon footprint fell by 1% between 2013 and 2014. Defra produces the data to try and gauge progress in reducing emissions that lead to climate change. The methodology is still being refined and the calculations are complex (hence the latest figures being for 2014). The research covers six main Greenhouse Gases (GHG) comprising: CO₂, methane (CH₄), nitrous oxide (N₂O) and three fluorinated compounds. The UK’s carbon footprint (measured by GHG emissions) peaked in 2007 at 1,032 Mt CO₂ equivalent. In 2014, it was 20% lower than the 2007 peak. As yet, there is no separate breakdown for agriculture.

Organic reforms – provisional agreement

Following numerous delays, a provisional political agreement has been reached by EU Member States on organic reform. The compromise includes Farm Commissioner, Phil Hogan’s suggestion to ‘park’ the two controversial issues, the presence of unauthorised substances and greenhouses using demarcated beds which (reported on last month). The agreement, reached after over three years of negotiations, paves the way for the reforms to apply from 1st July 2020. The provisional agreement still needs to be formally approved by the European Parliament and Council which is expected to take place in the next two months.

Data

Crop prices

UK ex-farm (per tonne)	Latest (28/07)	Last month (23/06)	Last year
Feed wheat	£136.10	£141.50	£110.00
Bread wheat	£144.70	£147.90	£135.70
Feed barley	£117.00	£122.30	£96.70
Oilseed rape	£304.70	£312.50	£279.70

Source: AHDB

Futures prices (per tonne)	Latest (28/07)	Last month (23/06)	Last year
Feed wheat (London – Nov '17) (£)	£147.00	£145.80	£133.10
Milling wheat (Paris – Dec'17 (€))	€174.25	€177.50	€163.75
Oilseed rape (Paris – Nov'17 (€))	€370.50	€360.75	€357.00

Source: AHDB

Spray prices – selected products

On-Farm Spray Prices - w/c 24th July 2017

Active Ingredient (AI)	Example Brand(s)	Pack Size (L; KG)	Price (£/pack)	Price (£/L)
Cereals - General Herbicides				
Diflufenican	Hurricane	1	26.75	26.75
Flufenacet + diflufenican	Liberator	5	247.33	49.47
Flufenacet + Pendimethalin	Crystal	10	120.65	12.07
Flupyr-sulfuron-methyl and thifensulfuron-methyl	Lexus Millennium	0.2	46.17	230.83
MCPA		10	41.77	4.18
Mesosulfuron iodosulfuron	Atlantis; Pacifica	2	173.42	86.71
Pinoxaden + Cloquintocet-mexyl	Axial	5	403.00	80.60
Cereals - Fungicides				
Azoxystrobin	Amistar	10	267.67	26.77
Chlorothalonil	Bravo 500; Daconil	10	53.33	5.33
Prothioconazole and others	Butus; Helix; Mobius	5	226.00	45.20
Cereals - Insecticides/Molluscicides				
Cypermethrin	Generic	5	23.25	4.65
Lambda-cyhalothrin	Hallmark Zeon	1	51.00	51.00
Metaldehyde (Slugs)	Generic	15	34.65	2.31
OSR - Herbicides				
Metazachlor	Butisan S	5	88.50	17.70
Propyzamide	Kerb	5	58.83	11.77
OSR - Fungicides				
Metconazole	Caramba	5	82.00	16.40
Priothiconazole	Kestrel	5	179.30	35.86
Tebuconazole + Prochloraz	Agate; Turbosan	5	43.00	8.60
Potatoes - Herbicides				
Diquat	Retro / Generic	10	63.33	6.33
Potatoes - Fungicides				
Cyazofamid	Ranman Top	5	185.00	37.00
Sugar Beet - Insecticides				
Pirimicarb	Aphox	1	39.00	39.00
General Sprays				
Glyphosate	Roundup	20	38.24	1.91

Spray prices refer to on-farm spot trade (ex. VAT) quoted across the Midlands, East Anglia and South East of England and do not include additional service costs (e.g. field walking etc.). Example brands are given for reference purposes only, alternative brands also available.

Fertiliser prices – selected products

On-Farm Fertiliser Prices – w/c 24th July 2017

Fertiliser Type (all prices in £/tonne)	This month	Last month
Compound Fertilisers		
00:24:24	250	241
20:10:10	230	230
Straights and Others		
34.5% N (UK)	198	175
Urea – 46%N	214	190
Ammonium Sulphate and Ammonium Nitrate (granular) (27%N:30%Sulphur)	195	200
Triple Superphosphate (46%P)	272	264
Muriate of Potash (60%K)	258	233

Source: InsideTrack

Prices are based on delivery during October 2017

Macroeconomic Data

Exchange Rates

Daily Rates	Present (w/e 28/07/17)	Last month (w/e 28/06/17)	12 months ago (w/e 29/07/16)
Euro vs Sterling	£0.8898	£0.8853	£0.8440
Sterling vs Euro	€1.1238	€1.1296	€1.1848
Sterling vs Dollar	\$1.3142	\$1.2849	\$1.3140
Dollar vs Sterling	£0.7609	£0.7783	£0.7610

Source: European Central Bank (ECB)

Annual average Euro value to date €1 = £0.83258

Interest (Base) Rates - %

Geographic Area	Present (27/07)	Last month (27/06)	Last year
UK	0.25	0.25	0.5
EU	0.0	0.0	0.0
US	1.25	1.25	0.5

Sources: Bank of England, ECB, US Federal Reserve

Inflation Rates - %

Geographic Area	Latest (Jun '17)	Prev. month (May '17)	Last year (Jun 2016)
UK	2.6	2.9	0.5
EU	1.4	1.6	0.1
US	1.6	1.9	1.0

Sources: OECD

Based on Consumer Price Index (CPI)

Real GDP Growth Rate Forecasts - %

Country	2016	2017	2018
UK	1.81	1.57	1.02
France	1.10	1.26	1.46
Germany	1.78	1.97	2.04
US	1.62	2.14	2.38
Japan	1.04	1.44	0.98
China	6.70	6.64	6.39
World	3.04	3.47	3.60

Source: OECD

Real gross domestic product (GDP) is given in constant prices and refers to the volume level of GDP. Constant price estimates of GDP are obtained by expressing values of all goods and services produced in a given year, expressed in terms of a base period. This indicator is measured in growth rates compared to previous year.

In Brief...

Key dates for coming weeks

Key dates* for Cross Compliance and ELS – main options			
Rule/ option	ELS edn.**	Date	Action
GAEC 7A		1 Aug	If you have a derogation you may cut hedgerows from this date
SMR 1		1 Aug	You may no longer apply organic manure with a high readily available N content to tillage land on shallow or sandy soils from this date except where crops will be sown on or before 15 September - see guidance (until 31 December).
EE12	2013	1 Aug	You may cut from this date (until 30 September).
EF22	2010, 2013	15 Aug	Option area can be returned to normal farm management from this date.
CAP		31 Aug	Catch crop must now be in ground for EFA (until 1 October)
GAEC 7A & 7C		1 Sep	You may cut hedgerows and trees from this date (until 28 February).
SMR 1		1 Sep	You may no longer apply organic manure with a high readily available N content to grassland on shallow or sandy soils from this date (until 31 December).
SMR 1		1 Sep	You may no longer apply manufactured N to tillage land from this date (until 15 January).
EB1,2	All	1 Sep	You may cut hedgerows from this date (until 28 February).
EC4, ED4	All	1 Sep	You may trim shrubby growth from this date (until 28 February).
EE7,8	2010, 2013	1 Sep	You may cut from this date (until 28 February).
EF1	All	1 Sep	You may cut from this date (until 28 February).
EK1	All	1 Sep	You may cut from this date (until 28 February).

*This summary is a memory prompt – always check guidance and/or contract **ELS edition which applies is determined by date of contract All = all editions where option is available
Source: RPA and Natural England

UK tractor sales up

According to the AEA, UK tractor sales are up by 14% in the first half of 2017, in comparison with the same period last year. It is estimated that 6,142 agricultural units (>50 hp) were sold. In terms of horsepower, 1,002 million hp were sold during Jan-June 2017, an increase of 17% against the previous year. Although the increases appear to be significant, these first-half sales were still the third lowest in the past 11 years. There is an element of 'catch-up' after very low sales in both 2015 (5,970 units) and 2016 (5,382 units).

EU-Canada (CETA) trade deal

The provisions of CETA which were agreed upon in late 2016 should start to become effective from 21st September, thus paving the way for over 90% of the treaty to come into effect on that date. The ratification process is still underway in the EU and there had been issues regarding the amount of cheese tariff rate quota that would be allocated to EU suppliers, however, these issues are expected to be ironed-out by September.

EFRA committee chair re-appointed

Neil Parish (Tiverton and Honiton MP) has been re-appointed as Chairman of the Environment, Food and Rural Affairs (EFRA) Committee in the new Parliament. This Committee scrutinises Defra's work and has a major task ahead as the UK negotiates Brexit.

Consultations relevant to arable sector

Consultations announced

Description	Department & deadline
How to 'Unlock Rural Britain's Digital Potential' – aims to explore the economic potential for rural businesses to take-up digital opportunities arising from broadband, mobile and other networks https://rurallengland.org/unlocking-the-digital-potential-of-rural-areas-research/	Rural England, SRUC and Amazon 1 st September
Climate Change Bill https://consult.scotland.gov.uk/energy-and-climate-change-directorate/climate-change-bill/	Scottish Government 22 nd September

Consultations reported or Government responses

Description	Department & date
Outcome of the public consultation 'Modernising and simplifying the CAP' https://ec.europa.eu/agriculture/events/cap-have-your-say_en	European Commission 7 th July 2017

Available by subscription only from: *InsideTrack*, Old Bell House, 2 Nottingham St, Melton Mowbray, LE13 1NW, UK.

Tel: +44 (0)1664 503230 E-mail: enquiries@insidetrack.org.uk

Inside Track is compiled by The Andersons Centre. Inside Track and the Inside Track device are trademarks of The Andersons Centre.

The editing team gratefully acknowledges the input provided by Cedric Porter of World Potato Markets (www.worldpotatomarkets.com).

DISCLAIMER: Whilst care is taken to provide accurate information, no liability whatsoever can be accepted for any omission or inaccuracy of fact or opinion, or any loss however caused.

© 2017

ISSN –0961-7426



Professional Advisors to Rural Business and on the Environment

Independent Agricultural and Rural Consultants

- Expert Opinion
- Rural Planning
- Renewable Energy
- Farming, Business & Estate Management
- Crops & Livestock
- Trees & Forestry
- Environment & Conservation
- RPA Matters

To find an independent Agricultural and Rural Consultant contact BIAC:

BIAC, Portbury House, Sheepway, Portbury, BS20 7TE

Telephone: 01275 375559

Email: info@biac.co.uk

Website: www.biac.co.uk

