DRAFT MINUTES OF THE SIXTY SECOND MEETING OF ACAF HELD ON 9 OCTOBER 2013

Present:

Chairman	Dr Ian Brown
Members	Ms Ann Davison Mr Barrie Fleming Professor Stephen Forsythe Mr Peter Francis Professor Ian Givens Dr Wendy Harwood Mrs Chris McAlinden Dr David Peers Dr Timothy Riley Mr Edwin Snow Mrs Stephanie Young
Secretariat	Mr Keith Millar (Secretary) – Food Standards Agency Miss Mandy Jumnoodoo – Food Standards Agency Dr Ray Smith – Food Standards Agency Mr Raj Pal – Food Standards Agency
Assessors	Mr Tim Franck – Food Standards Agency Professor Glenn Kennedy - Agri-Food & Biosciences Institute Mrs Hilary Neathey – Food Standards Agency, Wales Mr Stephen Wyllie – Defra
Officials	Mr Ron Cheesman – Food Standards Agency (part) Mr Gerard Smyth – Food Standards Agency in Northern Ireland Ms Elham Mirzahosseinkhan – Food Standards Agency (part) Mr Ernest Obumselu – Food Standards Agency (part) Ms Rosanna Mann – Food Standards Agency (part)
Speakers:	Professor Margaret Rayman – University of Surrey Dr Elaine Fitches - FERA Dr Adrian Charlton - FERA Ms Toni Smith – Food Standards Agency Mr Hefin Davies – Food Standards Agency

1. The Chairman welcomed delegates to the 62nd meeting of ACAF and reminded them that there would be an opportunity to ask questions at the end of the meeting.

2. Apologies for absence were received from Mr Tim Brigstocke, Ms Angela Booth and Mrs Karen Robertson (Scottish Assessor).

3. The Chairman welcomed Dr Wendy Harwood, Dr Timothy Riley and Mrs Stephanie Young to their first meeting. He invited the three new Members to provide a short background on their career history to date.

4. Mrs Stephanie Young (Enforcement) said she was a Trading Standards Practitioner and has been employed in an enforcement capacity for the past 17 years, prior to which she was employed in the farming industry. She holds formal qualifications in management, agriculture, trading standards, animal health, investigative practice and HACCP. She has recently obtained a BA Honours degree in business management.

5. Dr Wendy Harwood (Novel Biotechnology) said she currently works at the John Innes Centre as a research scientist specialising on the genetic modification of crop plants. She has a first class degree in Biology and a PhD in plant transformation. Dr Harwood also comes from a farming background.

6. Dr Timothy Riley (lay person) informed Members that he has a beef and lamb livestock farm. He sits on a number of technology boards and was a molecular biologist having a first class honours degree in Applied Biology and a PhD. Dr Riley has also worked in the civil service holding several senior roles before being appointed Chief Executive to a primary care trust.

Agenda Item 1 – Declaration of Members' Interests

7. Members of the Committee were asked to declare any relevant changes to their entries in the Register of Members' Interests, or any specific interest in items on the agenda. Dr Riley declared that his partner worked for FERA. Dr Harwood said she was a partner in her family farm business.

Agenda Item 2 – Draft Minutes of the Sixty first Meeting (MIN/13/02)

8. The minutes were adopted, subject to the following changes:

- paragraph 25, third and fourth sentences – to amend the text to read 'the ACAF Chairman added that he had attended a conference in October 2012 which concluded that there was little evidence to support the present views of EFSA on antimicrobial resistance, especially in the relation to the veterinary use of antibiotics for treatment and metaphylaxis. Another Member of the Committee stated that antibiotic use in feed is strictly controlled and that antibiotics were used prophylactically.'

Agenda Item 3 – Iodine in Animal Feed (ACAF/13/20)

9. Before inviting Professor Margaret Rayman (University of Surrey) and ACAF Member Professor Ian Givens to introduce paper ACAF/13/20, the ACAF Chairman announced that the trace element status of consumers and levels in food falls within the remit of the Department of Health and that any calls for support for research would need to be addressed to that Department. The European Food Safety Authority had given advice to lower the maximum permitted levels of iodine based feed additives in complete feedingstuffs. Additionally, the UK's Scientific Advisory Committee on Nutrition was also considering the issue of iodine in health at its meeting also being held on 9 October 2013.

10. Professor Rayman explained that iodine is an essential constituent of the thyroid hormones. The adverse effects of iodine deficiency during pregnancy can lead to cretinism, increased mortality, impaired psychomotor development, delayed mental and motor function, reduced intelligence quotient (IQ), poorer hearing and behaviour disorders. Dietary iodine requirements recommended by The World Health Organisation are 150 µg/day for adults and 250 µg/day during pregnancy. The increased requirement during pregnancy is to provide for increased thyroxine production; cover potential increased urinary loss; and provide iodine for the foetus after the onset of foetal thyroid function. Professor Rayman said that goitre had been a common condition in the UK up to the 1960s but due to changes in farming practice, goitre was far less common in the UK.

11. Professor Rayman noted that in recent studies of UK iodine status, results indicate that there is iodine deficiency in many young women of child-bearing age and pregnant women. In studies carried out on students from the University of Surrey results indicated that 40% of the test subjects would not meet the recommended WHO iodine requirement for adults and that 77% would not meet the WHO recommendation for pregnant women. Other studies carried out by the University of Surrey and other institutes in north east England, Scotland and Wales also indicate that many pregnant and young women in the UK have iodine deficiency. Professor Rayman confirmed that the University of Surrey had access to 1990s samples taken as part of the Avon Longitudinal Study of Parents & Children (ALSPAC). The University analysed mother—child pairs from the ALSPAC group by measuring urinary iodine concentration (and creatinine to correct for urine volume) in stored samples from 1040 first-trimester pregnant women. Subjects were selected on the basis of a singleton pregnancy and availability of both a urine sample from the first trimester and a measure of IQ in the offspring at age 8 years. As part of the study, factors such as breastfeeding, age, smoking, omega-3 fatty acid intake, maternal education and socio-economic status were taken into account. The findings of the

collaborative study between the Universities of Surrey and Bristol were published in the Lancet on 22 May 2013.

12. The group was classified as having mild-to-moderate iodine deficiency on the basis of a median urinary iodine concentration of 91·1 μg/L; iodine-to-creatinine ratio 110 μg/g. After adjustment for confounders, children of women with an iodine-to-creatinine ratio of less than 150 μg/g were more likely to have scores in the lowest quartile for verbal IQ, reading accuracy and reading comprehension than were those of mothers with ratios of 150 μg/g or more. When the less than 150 μg/g group was subdivided, scores worsened ongoing from 150μg/g or more, to 50—150 μg/g, to less than 50 μg/g. Further analysis of the data collected indicates that iodine deficiency may affect hearing. Iodine is found in a range of foods; the richest source is fish but the main source because of quantity of consumption is dairy products. The University of Surrey carried out a study of 100 pregnant women attending a Surrey ante-natal clinic. The findings indicated those women drinking ½ pint of milk or more a day were closer to achieving adequate iodine status. Similar findings were found in a study carried out in Oxford.

13. Professor Ian Givens informed Members of research undertaken by the University of Reading to determine the factors affecting the iodine concentration of bovine milk. He said that in the mid-1990s the average iodine content of UK milk rose, however there has not been a substantial change in the iodine content in recent years. An observation made by the University of Reading of the iodine content of UK milk collected in 1998/99 was that there was a difference between the iodine content of milk collected in summer and that collected in winter. Additionally, a study carried out by the FSA in 2007 also indicated that levels of iodine in both organic and conventional milk collected in summer were lower than that collected in winter. Overall, typical iodine concentrations in winter and summer milk were 400 and 200 μg/kg respectively, with organic summer milk being considerably lower than conventional summer milk. In all cases milk iodine concentration was extremely variable. Similar findings were found in a study carried out in 2009. Professor Givens commented that milk iodine content was dependent mainly on the iodine intake by the dairy cow. He added that industry targets of the dietary concentration of iodine in dairy cow diets, to meet the needs of the animal, were similar to the new maximum levels suggested by EFSA. However, the target of 2.3μg/kg DM would only be realistically achieved during the winter. The University of Reading suggested that further research is required to more clearly quantify the on-farm factors which influence milk iodine concentration including whether the use of rapeseed products in feed concentrates adversely affect it. Professor Givens said milk consumption in females aged 11-64 has declined in recent times which would contribute to reduced iodine status.

14. In conclusion, Professors Rayman and Givens said that:

- there is low iodine status in some sections of the UK population;
- mean milk iodine concentrations have not substantially changed in recent times but are lower than would be predicted from controlled trials;
- milk iodine concentration is highly variable and much lower in summer than in winter. Organic milk is consistently lower than conventional milk;
- there is a reduced milk consumption especially by young females that may contribute to lower iodine status; and
- research was suggested to improve the understanding of the on-farm factors responsible for milk iodine concentration.

Discussion

15. Following a question from a Member of the Committee, on the position of the iodine status in other Member States and countries. Professor Rayman said that the USA and Norway may have similar issues to the UK although the UK had a stronger evidence base. Dr Smith added that he had discussions with a colleague who indicated that consumers in Finland have similar iodine status. Professor Rayman said that compared to mothers who bottle feed their babies, mothers who breastfeed need to increase their iodine intake to support both themselves and their babies. A Member of the Committee said that this could be a result of poor diets. The same Member asked what were the effects of ingesting excess iodine in the diet and would it be beneficial to add iodine to animal feed. Another Member of the Committee commented that the EFSA paper made assumptions but it did not answer any questions. More understanding was required to interpret the science rationale and assumptions made in the EFSA proposal and to understand the differences identified in the research carried out by the University of Reading – in respect to milk iodine concentrations. Additionally, the same Member asked what the maximum amounts of iodine would be that would affect animal genetics. Professor Rayman said that excess iodine can cause thyroid problems. However, this is not a problem in the UK. The Australian and New Zealand Governments have introduced mandatory iodine fortification in foods to help improve public health.

16. A Member of the Committee noted that mineral supplements for dairy cows contain iodine along with other trace elements to help fertility. Another Member of the Committee asked why the iodine content from milk produced from summer grass and organic milk was low. Professor Rayman said this was because in summer, cattle were grazing out-of-doors and were not receiving the iodine-containing food concentrates when kept in barns in the winter; as for organic animals, even in winter they are fed on silage (possibly with small amounts of concentrates) and may graze partly on clover which reduces the absorption of iodine. Professor Givens added that there were little available data on the factors affecting absorption of iodine and the subsequent effect on milk iodine concentration. Another Member of the

Committee asked about the use of disinfectants mentioned in the EFSA proposal. Professor Givens noted that when speaking to organic producers, iodised disinfectants and teat dips are used in both organic and conventional milk production (and this is unlikely to explain the difference in milk-iodine concentration).

17. Following questions from Members of the Committee on EFSA's rationale for lowering the maximum permitted levels for iodine, Dr Smith explained that the issue of iodine-containing feed additives is a consequence of the current re-authorisation process for feed additives. Companies had to provide a dossier providing safety data for the consumer, target species and the environment. These dossiers are being assessed by EFSA's FEEDAP[1] panel which is looking at particular feed additives (not iodine in feed per se). The Panel has published a number of opinions, for example one for calcium iodate published in March 2013, for iodine based additives. One of the FEEDAP conclusions was that, for reasons of consumer safety, the maximum limits for iodine in feed for dairy cattle and for laying hens should be reduced. This was not in agreement with the views of Professors Rayman and Givens.

18. The ACAF Chairman said that ACAF should work with the SACN on this issue, with a Member of SACN providing a presentation outlining the Committee's views and discussions of this topic at a future ACAF meeting. The ACAF Secretary noted that at present there was no clear answer on whether the UK should oppose moves to lower maximum permitted levels of iodine in complete feed. He suggested it may be beneficial if a joint SACN and ACAF Working Group were established to further explore this issue.

Action: Secretariat

Agenda Item 4 – Insects as a potential source of animal feed (ACAF/13/21)

19. Dr Elaine Fitches and her colleague Dr Adrian Charlton (FERA) introduced ACAF paper 13/21. Dr Fitches explained that with an increasing global population and a rise in per-capita meat consumption in some developing countries, the European Union announced in April 2011 an initiative highlighting the need for it to find alternative and sustainable protein sources. Research into the use of insects as an alternative protein source for animal feed is being undertaken because insects are highly efficient in the rapid conversion of waste into biological material - for example, housefly larvae can complete development in 7-10 days at room temperature. Additionally, a variety of insects have been shown to have equivalent or higher protein content than soyabean. Dr Fitches noted that in terms of productivity/land use it would appear that comparing the production of soya, there

[1] The Panel on Additives and Products or substances used in Animal Feed

may be benefits in insect production, i.e. 1000 tonnes/year/ha compared to 2.47 soya tonnes/ha.

20. Global research has predominantly focused on fly species (black soldier fly and house fly) which are able to develop on a range of waste materials. Dr Fitches stated that research was being undertaken in South Africa, USA, and Spain. Additionally, at the International Conference on Forests for Food Security and Nutrition held in May 2013, the Food and Agriculture Organisation launched the publication –'Edible insects future prospects for food and feed security.' In the Netherlands in September 2013 the Insect Centre was established. The Centre involves 15 companies and government agencies who are interested in promoting the application of insects and insect larvae as a protein rich source of feed, food and the pharmaceutical industry. Dr Fitches then explained that FERA was involved in research looking at the use and exploitation of insects as alternative protein sources. As part of its work, Dr Charlton explained that FERA was considering the quality and safety of insect protein. This includes bringing together robust nutritional data, filling any gaps in this data, establishing performance traits of animals fed on insects, considering issues such as taint of meat and consumer perceptions and the consideration of the use of by-products such as fats and oils. The derived insect protein can be used as animal feed. By-products can include an oil or fuel, in the cosmetic industry (the oil content is not markedly different from that of palm oil currently used in the cosmetic industry) and in the manufacture of products such as chitosan.

21. Dr Charlton also explained that FERA is also considering the life cycle of insects, ensuring the safety of products but not the commercialisation aspects of using insects as an alternative protein source. He said that chemical risks would be dependent on the processes used to extract the protein. Also, different risks may result from the feedstock and insect combinations. Examples of chemical risks may include bioaccumulation of metals and environmental contaminants; concentration of natural contaminants such as mycotoxins and transfer of toxic residues from farming practices (e.g. pesticides). In terms of microbiological safety risks, these are also dependent on feedstock and species but can be potentially managed through processes such as heat and pressure. Anticipated risks may include; *Salmonella* spp, *Campylobacter*, *Listeria* spp, *Cryptosporidium parvum* and viruses such as rotaviruses and Hepatitus E.

22. Dr Charlton advised Members that there is very little information on insect allergens. FERA will be undertaking two approaches to gain more information on these namely carrying out a wide screen for known allergens using LC-MS/MS and ELISA and where possible looking at genes in insects that could allow them to cause allergic reactions in humans. The researchers are also considering the nutritional profiles of insects for designing feeding trials and product quality factors such as taints in meat from animals reared on insect-based diets. In describing potential and

known issues, Dr Charlton said that possible risks considered included botulism in manures, veterinary medicines residues and heavy metal accumulation. Currently, the legislative challenges taken from the FAO report are that manure and urine are currently banned as animal feed and insects are animals; insects cannot be fed to animals including wildlife (but excluding pets); and insect meal is classified as processed animal protein therefore BSE regulations apply to the use of insects as animal feed.

Discussion

23. One Member of the Committee suggested that consumer perceptions on the use of insects should be gauged through consumer consultation which outlines aspects of safety and benefits. Dr Fitches said, following a question from the ACAF Chairman on whether the FERA is also considering the use of insects to feed ruminants, that the research was only focusing on animals that naturally consume insects (e.g. fish). One Member of the Committee noted that the current legislation prohibits the feeding of processed animal protein (PAP) to monogastrics and asked whether there were proposals to amend the legislation. Dr Fitches said that she hoped that the research would provide an impetus for a change in the legislation. Another Member of the Committee, noting that the presentation provided examples of research outside Europe, asked how widespread the research was. Dr Fitches said it was difficult to ascertain the number of research projects being undertaken globally. It would take a number of years for processes to be developed. It was noted that the Wageningen Group had developed foods using insects such as burgers. Dr Fitches noted that FERA uses waste streams such as chicken manure rather than abbatoir waste.

24. Members of the Committee were keen to receive further updates on the work being carried out by FERA. Additionally, Members sought an update on the BSE feed ban contained in ACAF paper ACAF/13/25 in relation to insect PAP.

Action: Secretariat

Agenda Item 5 – Consumer Engagement (ACAF/13/22)

25. ACAF Member, Ms Ann Davison, introduced ACAF paper 13/22 on consumer engagement. As part of her presentation, Ms Davison explained that the main ways that the Committee could consider improving the way it engages with consumers could include engaging with stakeholder groups such as Which?, through direct engagement, such as the Agency's 'You speak we listen events', attending consumer events, sharing research findings and feeding more questions into consumer attitude surveys. Another important area is to ensure that messages from the Committee were clear, using plain English and using active verbs.

Discussion

26. One Member of the Committee said it was important to understand grassroots consumer views and so more use of consumer panels that represent segments of the public was a good idea. Ms Davison said that such panels, if briefed clearly, could provide rapid feedback. They need regular refreshing with new members, she added, to prevent professionalisation. Ms Rosanna Mann of the Agency's Social Science Research Unit stated that the Unit's consumer surveys and social science research to date had not specifically looked at animal feed issues. However, there was scope to include more questions on animal feed issues in future social science research to increase the Agency's understanding of the public's knowledge, attitudes, and behaviours towards animal feed issues. Ms Elham Mirzahosseinkhan of the Agency's Consumer Engagement team explained that the Agency uses four specific methods of engaging with consumers, namely:

- online panels;
- citizen fora;
- carry out 'you speak we listen' initiatives; and
- through its Consumer Panel members, which include lay members from scientific advisory committees.

27. The ACAF Chairman recognised that the Agency does carry out a lot of work on consumer engagement. The ACAF Secretary added that it was important that the agency was consumer facing and suggested that the Committee continues to work with its consumer representative, 'the Agency's consumer and social science team' to improve its consumer engagement.

Action: Secretariat

Agenda Item 6 – Feed Law Enforcement Review Implementation Programme (ACAF/13/23)

28. Ms Toni Smith of the Agency's Feed Review Implementation Team provided an update to ACAF paper 13/23. She said that work on the five workstreams contributing to the programme (that was established in November 2012 to improve the current local authority (LA) feed law enforcement delivery system) was progressing well. In particular:

    - the Implementation Team has held many regional/group meetings with LAs and other stakeholders.;
    - as regards earned recognition, the implementation team has held discussions with the Agricultural Industries Confederation, British Egg Industry Council, Red Tractor and the Grain and Feed Trade Association. Following these discussions the team is fine-tuning the governance required

so that earned recognition can be effectively implemented into the new delivery structure. Ms Smith explained that a pilot on earned recognition involving three local authorities will be carried out in November 2013. Additionally, following discussions with the Veterinary Medicines Directorate and Animal Health and Veterinary Laboratories Agency, both organisations have indicated they are considering moving to a system of earned recognition;

- work on developing a regional/national co-ordinated approach to LA delivery through the National Trading Standards Board (NTSB) is progressing. The aim of working with this body is to gain better outcomes with greater LA involvement than at present. There are several sub-projects underway which aim to identify how to work effectively with the NTSB. The results of these projects are due in March 2014;
- the implementation team is also working with stakeholders to realise benefits of the proposed changes to the delivery of feed enforcement. As part of this work, the Programme Board will scrutinise and agree the Implementation Team's work to identify benefits of effective feed enforcement to stakeholders.

Discussion

29. Following a question from the ACAF Chairman Ms Smith said that the feed review implementation programme stemmed from the recommendations of the European Commission's Food and Veterinary Office (FVO) audit in 2011. Mr Ron Cheesman of the Agency's Feed Law Enforcement Team added that that the work will be more focused on improving the delivery of enforcement activities by providing more opportunities and benefits for local authorities working together and sharing data.

30. One Member of the Committee acknowledged that earned recognition had been around for a number of years and questioned what would happen when a member of an assurance scheme cannot demonstrate it meets the requirements of earned recognition. The Member said that the principle for earned recognition was to demonstrate compliance and provide evidence of these. The same Member asked if there was a national database. Mr Cheesman advised that the code of practice on feed law enforcement describes two levels of earned recognition: namely through membership of an assurance scheme; and by full compliance and a good record of compliance with feed law. Audits of assurance schemes will be undertaken and safeguards are included in circumstances where LAs have concerns about the compliance of a feed business operator where the earned recognition status can be removed. Therefore, the system will have controls in place and the Agency will be carrying out monitoring exercises which will be taken into account when a review is undertaken. Following a further question from the Member of the Committee on the range of data to be collected, Mr Cheesman explained that there was a trial with local authorities to obtain information centrally that will enhance data held by LAs.

31. Following a question from the ACAF Chairman, Mr Cheesman said that it was not compulsory for feed businesses to be a member of an assurance scheme; however, there were benefits of belonging to such schemes. A Member of the Committee asked whether the Rural Payments Agency (RPA) would have access to data from LAs. Mr Cheesman said that the Agency had held discussions with the RPA on data they held and better sharing of information between the two organisations. The discussions are exploring how to share information on official controls to see the effectiveness of assurance schemes. Similar discussions are also being held with the Veterinary Medicines Directorate and the Animal Health and Veterinary Laboratories Agency. A Member of the Committee asked if there were registers of non-compliant businesses. Mr Cheesman said that a risk rating scheme had been established to monitor non-compliant businesses. Additionally, schemes had also been set up to tackle problem areas and sectors. The Agency was also working with other government departments on this issue and was sharing enforcement priorities with them.

32. The ACAF Secretary said that a further update on this topic would be provided following the FVO audit in January 2014.

Action: Secretariat

Agenda Item 7 – Update on Official Controls 882/2004 (ACAF/13/24)

33. Mr Hefin Davies of the Agency's Official Food and Feed Control Policy Unit informed the Committee that EU Regulation 882/2004 on official controls for feed and food law (animal health and animal welfare) sets out how Member States should monitor and enforce businesses' compliance with feed and food law (animal health and animal welfare). The European Commission believes that the legislation has been broadly successful in setting out a framework for feed and food controls throughout Europe, but has identified opportunities to strengthen Regulation 882/2004 including the financing of official controls in Member States.

34. The European Commission has adopted a package of measures to strengthen Regulation 882/2004 which aims to provide a modernised, simplified, more risk-based approach. Businesses will benefit from simpler, science and risk-based rules in terms of reduced administrative burden, more efficient and transparent processes and improved cross-border co-operation. As part of the review of Regulation 882/2004, Mr Davies said that the FSA has the lead on the official control proposals, whereas Defra is the lead department for the animal health, plant health, plant reproductive material and financial proposals. The whole agri-food chain will be covered by the proposed revision of the Regulation.

35. For importers the proposal will mean a common set of organisational rules applicable to all checks carried out at borders on food, feed, animals, products of animal origin, plants and other products. There will be minimum requirements for facilities and equipment at border control posts. Importers will be required to use a Common Health Entry Document to accompany consignments. Additionally, a common IT system will be used to track the movement of consignments, expanding the current use of TRACES[2]. Laboratories will see benefits in that there will be more flexibility on accreditation requirements to ISO standards for laboratories that carry out analysis for official control purposes including temporary derogation to deal with emergency situations. For *Trichinella* laboratories attached to business operators' premises there will be permanent exemption from accreditation requirements. However, laboratories that carry out plant health tests will need to be accredited and audited.

36. Mr Davies explained that when carrying out official controls activities, local authorities will continue to provide a risk-based approach, ensuring that official controls are carried in a way that minimises the burden on businesses. Enforcement authorities will be required to provide businesses with a copy of their report on official controls. New rules will be established to reinforce transparency and there will be more stringent requirements to issue official certification, and it will be clarified that those requirements will apply to official certification necessary for exporting goods to a third country. The proposal includes a significant number of delegated and implementing acts; the Agency and other Government departments are carefully considering whether the proposed use of these is justified and needed and whether they are in line with the EU's scope of competence.

37. Mr Davies said that fees are already mandatorily charged on operators in the fish, meat and dairy sectors. The proposal extends mandatory fees to other sectors of the agri-food chain and to nearly all official controls. Micro-enterprises will be exempted from fees, except in cases of non-compliance.

38. Members were informed that during October 2013 the Agency will launch a 12 week public consultation on the proposal, including a draft impact assessment which currently shows that the cost of official controls in the UK is £171 million, of which £59 million is charged to industry. In terms of animal feed, the cost of official controls is £6 million per annum which includes sampling and analysis with £6-7,000 of the costs charged to the industry. The impact assessment will be updated to reflect the outcome of the negotiations. With respect to the next steps, Mr Davies advised Members that the European negotiations commenced in July 2013 with subsequent meetings held in September 2013. The negotiations are likely to last until May 2014 (i.e. after the European Parliamentary elections). The UK European

[2] TRACES- Trade Control and Expert System

Affairs Committee that considers issues concerning the European Union is considering the negotiating lines for the UK position on the proposal. Comments received following the close of the public consultation will form part of the evidence base for the UK position on the proposal. Members were asked to consider and advise on the impact of the proposal on local authorities, how charging could affect delivery of official controls including microbusinesses, and other considerations in the feed sector that could impact on the proposal and negotiations.

Discussion

39. Mr Davies said, following a question from the ACAF Chairman, that depending on the sector some additional burdens may be placed on businesses in terms of charging. At present minimum charges are payable by some businesses; however, the proposal introduces a flat rate for all businesses except microbusinesses. The ACAF Secretary said that there are currently no charges imposed on businesses that register as feed business operators. However, charges apply where businesses seek approval. It was uncertain what the future charges will be. Mr Davies noted that charges will only be levied at microbusinesses that are non-compliant.

40. Mr Davies said it was unclear how the sharing of data between official control bodies will work using the new EU information management system for official controls (IMSOC). He also agreed that minimal administration burdens for regulators needed to be included in the proposal. One Member of the Committee asked which administrative burdens were to be reduced. Mr Davies said that Agency economists have put a model together covering a period of 10 years and have estimated that the cost to businesses and enforcement to be £30 million per annum. A further update on the review of Official Feed and Food Controls will be provided at a future meeting.

Action: Secretariat

Agenda Item 8 – Matters arising from the Minutes of previous meetings

Antimicrobial Resistance

41. The Defra Assessor (Stephen Wyllie) read out text provided by an official of the Veterinary Medicines Directorate (VMD) on the VMDs perspective of paragraphs 25 and 27 of the minutes of the 8 May 2013 ACAF meeting. A copy of text is attached at Annex I.

Antimicrobial Resistance

42. ACAF Member, Professor Stephen Forsythe, provided Members of the Committee with an update on the Advisory Committee on Microbiological Safety of Food

Working Group on Antimicrobial Resistance that he had been co-opted to join. A copy of the update is provided at Annex II.

Agenda Item 9 - Any Other Business

43. The ACAF Chairman provided Members with a short summary of the proceedings of the General Advisory Committee on Science (GACS) meeting held on 8 October 2013. He said that the meeting had been particularly interesting with Members discussing the role and responsibilities of the new Chief Scientific Advisor (CSA) and Director of Science. At a future meeting GACS Members will be discussing the following aspects:
   - the distinction between the CSA and Director roles, particularly the balance in each role between challenge, assurance/accountability, and oversight
   - relationships with GACS and other SACs, including challenge roles and lines of communication and reporting.

44. The ACAF Secretary confirmed that ACAF Members would be informed when appointments for the CSA and Director of Science posts had been made.

Action: Secretariat

45. Other agenda items discussed by GACS included:
   - the FSA intelligence hub - GACS was interested to find out about this work, and broadly supportive;
   - science in the Scientific Advisory Committees (SACs) - this standing item aims to foster co-ordination and joint work across SACs - on this occasion it flagged a need for ACAF and SACN to work more closely on iodine in animal feed and in the diet; and
   - GACS Members received updates on its working groups and forward work planning activities.

Date of the next meeting

46. The ACAF Chairman said that the next meeting would take place on 26 February 2014 in Aviation House. Additionally, the out-of-London meeting will take place between 8 and 9 May 2014 at the Mcdonald Old England Hotel, Bowness-on-Windermere, Cumbria.

Information Papers

47. The ACAF Chairman drew the Committee's attention to the following information papers:

- EU Developments (ACAF/13/25);
- Update on the work of other advisory committees (ACAF/13/26); and
- GM Update (ACAF/13/27).

ACAF Secretariat
December 2013

Question and Answer Session

Toby Parker (United Fish Industries) – thanked the Committee for the opportunity to attend the open meeting. In relation to Agenda item 3, iodine in feed, Mr Parker had several observations. Mr Parker said that United Fish Industries manufacture fishmeal and fish oil from the waste fish left from the human food industry. The frames of the fish are processed into fishmeal and fish oil which in turn is incorporated into animal feeds. The first observation was that United Fish Industries has recently started exporting UK manufactured fish oil to Germany and Holland and amongst the many specifications the company has to meet for this business is a minimum iodine level in the oil. It appeared to Mr Parker that United Fish industries customers have seen the value of iodine.

The second observation Mr Parker made was in respect of the paper presented by Professors Rayman and Givens, in which it was stated that milk beverages and fish were valuable sources of iodine particularly to pregnant women. Therefore, it seemed even more irrational that the UK (because of EU legislation) stopped feeding ruminant animals (particularly cattle) fishmeal as part of their diet. The important point was that fishmeal can contain up to 10% fish oil and fish oil is a valuable source of iodine.

David Howells (Feed Fats Association) stated that the Feed Fats Association would be holding a meeting on 10 October 2013 to discuss the forthcoming FVO audit, which would be considering the legislation on oils and fats introduced following the 2011 dioxin incident in Germany.

Annex I

Antimicrobial resistance – VMD perspective relating to ACAF minutes 8 May 2013

Paragraph 25 of the minutes

"Professor Forsythe quoted from a statement from Dr Hilde Kruse (Programme Manager Food Safety, WHO Regional Office for Europe) which said that "Resistance in the foodborne zoonotic bacteria Salmonella and Campylobacter is clearly linked to antibiotic use in animals used for food and foodborne diseases caused by such resistant bacteria are well documented in people"

VMD considers that Dr Hilde's claim overstates the consensus of opinion on this issue – although, of course, in this complex area there is sufficient variation between the results of different researchers to support a number of viewpoints.

"Another Member of the Committee stated that antibiotic use in feed is strictly controlled and that antibiotics were not used prophylactically."

The VMD believes that antibiotics are used prophylactically and not always responsibly, more specifically in calves and pigs. The VMD is looking into this practice. (Routine prescribing of antibiotics prophylactically, may take place for example, at calf rearers where calves are sourced from different farms and infection risk is raised. All calves will be treated in advance of any disease being diagnosed.)

The VMD is holding a series of Sector Specific Engagement Forums in December. There will be 5 different meetings, Ruminant/Pig/Poultry/Fish/Companion Animal) where delegates will discuss the use of antibiotics and antimicrobial resistance. These are follow ups to an earlier round of sector specific meetings which discussed the drivers for current antimicrobial prescribing practices. We are also holding a sector specific workshop in December on the management of medicated feed prescriptions.

Paragraph 27 of the Minutes

"One of the members of the Committee suggested that VMD may have data on the contribution of animal feed to antimicrobial resistance".

Unfortunately, the VMD does not hold such data. Antibiotic resistance is a complex issue but the scientific consensus is that while human prescribing is the main driver of resistance in human medicine, responsible prescribing is essential good practice in both human and veterinary medicine. This reflects the views expressed in the CMO's Annual Report and the 5 year AMR Strategy.

As with all veterinary medicinal products, a maximum residue limit (MRL) is set for antibiotics. In order to set that MRL, the residue in the meat has to be lower than what is considered to be one that is likely to increase the level of resistant bacteria in the human gut tract.

Any proposals on the restriction of availability of medicines for veterinary use must be based on scientific evidence.

Annex II

ACMSF Working Group on Antimicrobial Resistance

Background

At the January 2013 Advisory Committee on Microbiological Safety of Food (ACMSF) meeting members considered a paper updating them on recent developments in relation to antimicrobial resistance (AMR) and the foodchain. The Committee agreed to establish a sub-group of members to consider the topic in detail and to ensure that appropriate weight was given to the foodchain in relation to discussions and developments on AMR.

The ACMSF Working Group on AMR plan to meet four times a year. We met by teleconference on 30th July to discuss the terms of reference and scope of work and had a first formal face-to-face meeting on 9th September 2013. Next meeting is scheduled to take place in March 2014.

Scope

Many other groups are involved in work on antimicrobial resistance (ARHAI, DARC, VRC – see annex). Some of these are concerned with risk management rather than risk assessment which will be the working group's task. The ACMSF-AMR working group will liaise with and co-ordinate their work with these other groups and bodies to avoid duplication.

Both imported food and food produced in the UK are included within the groups remit.

Outputs

The group will report back to the main ACMSF Committee meetings on its discussions and recommendations. This may be an oral update or may take the form of a written paper for more significant issues/discussions.

Terms of reference

The groups' role will be to assess the risks to humans from foodborne transmission of antimicrobial-resistant microorganisms and provide advice to the ACMSF.

The specific terms of reference are:

- To brief ACMSF on developments in relation to antimicrobial resistance and the food chain and identify evidence that will assist the group in assessing the risks.

- To review key documents and identify the risks for the UK food chain and relevant aspects of the feed chain in relation to antimicrobial resistance which may have consequences for human health.

- To comment on progress in understanding the issue of antimicrobial-resistant microorganisms and the food chain since the ACMSF produced its report in 1999 and subsequent reviews in 2005 and 2007, including the relevance of any outstanding recommendations.

- To highlight key research or surveillance gaps in relation to antimicrobial-resistant microorganisms and the food/feed chain and identify those which are considered a priority.

Summary of topics discussed on 9th September. Extracts taken from the ACMSF Secretariat meeting notes.

1. Outstanding recommendations from ACMSF 1999 report on AMR

   (i) Members reviewed the outstanding recommendations from ACMSF's 1999 report on Microbial Antibiotic Resistance in Relation to Food Safety and discussed whether these were still relevant. The group noted that it was 14 years since the report had been published and a lot of work had been undertaken since then. This meant that some of the recommendations may be out of date and in some cases there may no longer be a need for them, or they may need updating or re-framing, for example in light of developments in molecular testing for resistance genes.

   (ii) The role of commensals has been identified as important in spreading resistance genes to pathogens and it was noted that this is currently under review by EFSA. It was also noted that when the ACMSF 1999 report was being written methods for detection of resistance would have used a surrogate marker and there was now more emphasis on the movement of resistance genes between organisms and use of molecular methods for tracking the movements of genes. It was noted that the hazard is really the resistance gene rather than the organism it is in so it is the gene underlying the resistance in commensals that is important.

   (iii) The group also considered imported feedstuffs and noted there was a difference between bacteria in imported animal feed and imported feed that is medicated (including water). It was thought that there is little feed that is imported already medicated but imported feed maybe contaminated with micro-organisms. It was considered that it was important to know whether there is an enhanced risk from imported feed and there is still a lack of data to inform assessment of these risks.

2. European Medicines Agency (EMA) advice on colistin and tigecycline

   (i) The European Commission submitted a request to the EMA for advice on the impact on public health and animal health of the use

of antibiotics in animals. The EMA published an opinion responding to this request on 19th July 2013 focussing their advice on colistin and tigecycline.

(ii) The group agreed that the EMA advice, including removing prophylactic use of colistin in animals and monitoring of off-label use was proportionate.

(iii) In relation to tigecycline the group noted that it is currently unlicensed for use in veterinary medicine, and therefore not used in the UK. As long as this restriction remains the group considered it was not of significant concern.

3. Quantification of human deaths due to antibiotic use in chicken

(iv) The Group considered a letter published in Emerging Infectious Diseases in August 2013 by Collignon *et al.* The authors estimated the number of human deaths and hospital admissions in European countries (including the UK) resulting from third generation cephalosporin resistant *E.coli* in poultry.

(v) The authors had used a figure from a study in the Netherlands by de Kraker *et al* which estimated the number of human cephalosporin resistant *E.coli* infections that could be due to poultry and had applied this to other European countries. The group expressed concerns over the extrapolation of this figure to other countries as there was evidence that ESBL levels in poultry in the Netherlands were much higher than in the UK and also evidence that cephalosporin usage in the Netherlands was not the same as in the rest of Europe. It was also highlighted that a more recent paper by de Kraker *et al* queried some of their initial research findings. The group also felt that some of statements in the letter were unsubstantiated and needed more scrutiny. Members noted that the authors should be commended for attempting a quantitative risk assessment but felt that they had not taken sufficient account of uncertainty in the data used to calculate their estimates and as such there were likely to be large confidence intervals associated with the estimates.

4. DH AMR Strategy

(vi) The group noted that the DH strategy on AMR was due to be published on 10th September and agreed to provide comments on the strategy. They also noted DH's intention to produce a draft implementation plan which they would have the opportunity to comment on at a future meeting. Members were updated on some of the groups being established by DH to help in implementing the AMR strategy and it was suggested that ACMSF

may be involved in one of the groups that will be seeking input from several advisory committees.

Membership:

Prof David McDowell (Chair)
Prof John Coia
Prof Rick Holliman
Mr Paul McMullin

Mr Stephen Wyllie (Defra representative)
Ms Sally Wellsteed (DH representative)

Co-opted members

Prof Stephen Forsythe (ACAF member)
Mr Chris Teale (AHVLA)
Dr John Threlfall (consultant microbiologist)

Secretariat
Ms Kara Thomas
Dr Paul Cook
Dr Sophie Rollinson