



Quality Assurance. From farm to shop.

Report 2012 - Outlook 2013

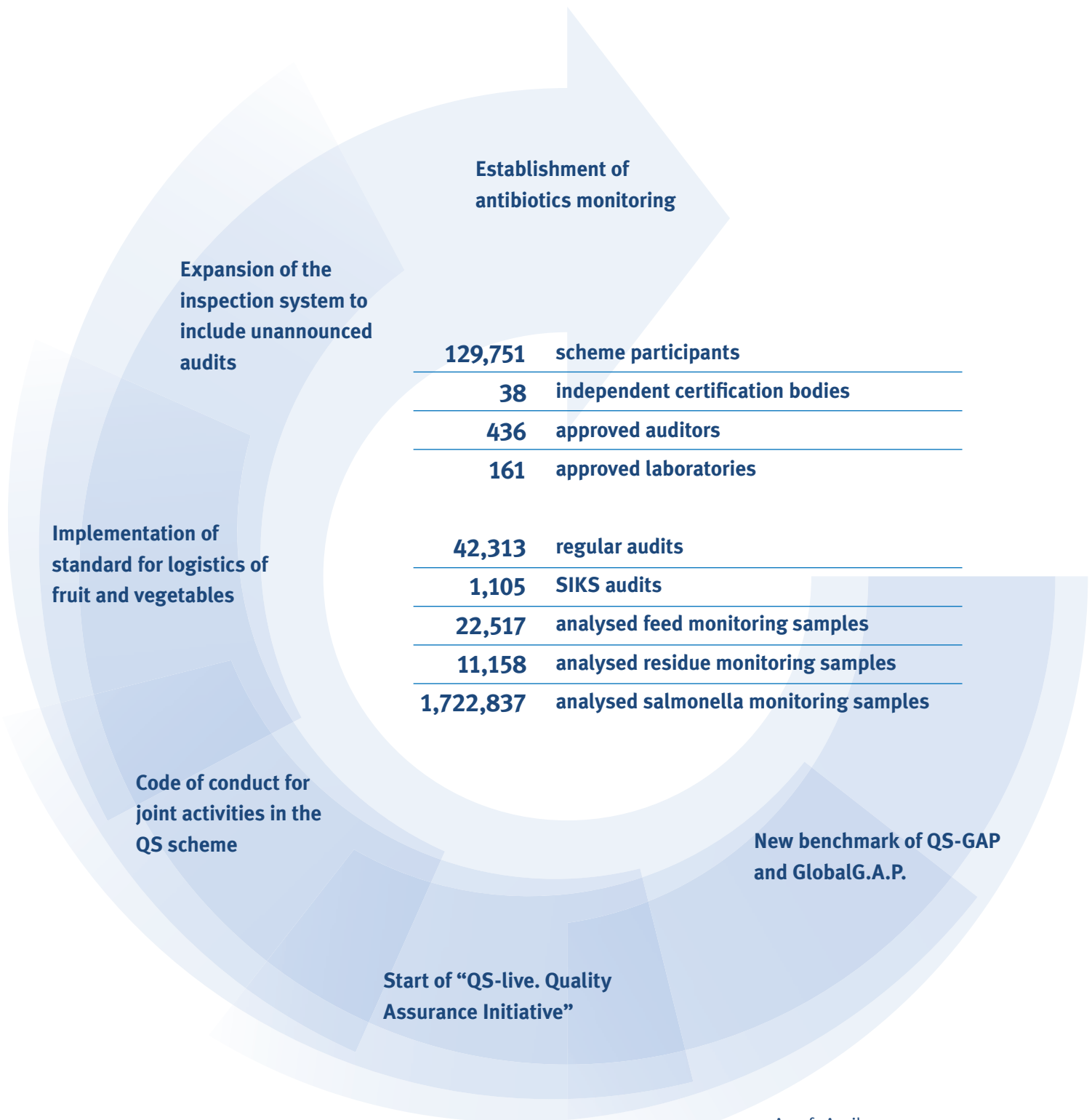
**Strong Partners.**

**Hand in hand for safe food.**



**QS. Ihr Prüfsystem  
für Lebensmittel.**

# The QS scheme 2012/2013



As of: April 2013  
(deadline for figures and graphics:  
1 March 2013)

## Contents

Foreword p. 4

## What we're going to tackle in 2013

QS-live p. 6

Antibiotics monitoring p. 8

Logistics standard p. 10

Unannounced audits p. 11

## What moved us in 2012

Reports from the advisory boards p. 12

Reports from the supply chains p. 14

## Facts and Figures

Meat and meat products p. 24

Fruit, vegetables, potatoes p. 32



**Markus Mosa**  
Chairman of the Shareholders' Meeting  
and Curatorship of  
QS Qualität und Sicherheit GmbH

## Taking the initiative together

Every day in food retail outlets, we are pleased to give interested consumers answers to questions on the quality, safety and origin of our food. It is of benefit here that we can rely on quality assurance all along the supply chain. All of the responsible persons in the businesses involved in the food chain have to assure quality and safety on a daily basis.

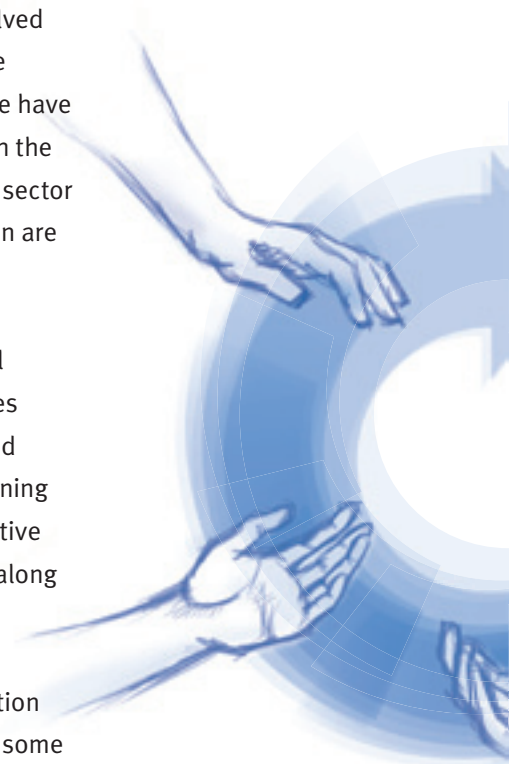
When it comes to social issues, the entire chain – from agriculture to the food retail sector – is responsible. Together we should establish practicable solutions in order to find the right way to the advantage of the consumer and the industry. The QS scheme offers the unique opportunity to hold discussions on an equal footing with everyone involved in the food chain. We should also use this platform in the future to coordinate and align socially relevant topics. We have already succeeded in doing this in an exemplary way with the coordination platform to renounce piglet castration. The sector initiatives on animal welfare in pig and poultry production are also coordinated and supported by QS.

QS assists the economic operators in implementing legal measures specifically and in a practical manner. Examples of this are antibiotics monitoring, which was implemented last year, and salmonella monitoring which has been running successfully for ten years now. We will have to remain active in the future too if we are to bring the risks that exist all along the chain under the proper control.

In the interest of those involved in the industry, cooperation with state bodies makes good sense and is necessary at some points. In doing so, however, we must always bear one thing in mind: the data of QS scheme participants must always be handled responsibly and with trust.



Markus Mosa





**Dr. Hermann-Josef Nienhoff**  
Managing Director  
QS Qualität und Sicherheit GmbH

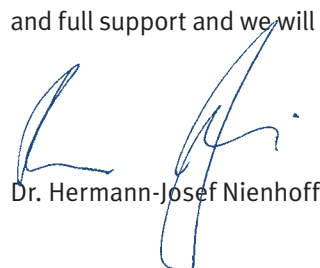
## Reliability requires a sense of reality

The economic operators in the QS scheme showed once again in 2012 that they are more than capable of tackling new tasks quickly and practicably. Within a very short space of time, they prepared viable concepts in the form of unannounced audits and antibiotics monitoring and pressed ahead with their practice-orientated implementation. By revealing antibiotics use for more than 90 percent of pig and poultry production businesses and being audited in general without prior notification, they make their work methods transparent and prove their reliability.

As an independent scheme of the industry, we support self assessments. In doing so, we have to keep testing ourselves critically and questioning the system we use. The latest incidents involving aflatoxin in animal feed have shown that we have to respond even more quickly and forcefully. The entire chain has to be vigilant and ensure that no partners or methods are admitted which can harm all of us in the scheme.

Everyone involved in the chain all the way through to the consumer must be able to rely on the assured origin of all products from all pre-suppliers, which means that verifiable quality assurance has to become part of our daily lives. We should critically review the extent to which special origin labelling or even higher mandatory documentation requirements are necessary. The objective cannot be to constantly control everything and everyone by imposing even more inspections. What we need are inspections in the right places at the right time and to do so, we have to assess the risks accurately and act accordingly.

Franz-Josef Möllers was appointed the first special ambassador in the QS scheme in April 2013. In his capacity as advisory board chairman, Franz-Josef Möllers has made a decisive contribution in the last ten years to the advancement and further development of the QS scheme. We have always been able to rely on his advice and full support and we will continue to do so in future.



Dr. Hermann-Josef Nienhoff



# QS-live. The quality assurance initiative gives a clear perspective

Rainer, the poultry producer



“

The highest standards for poultry production apply in Germany – which means reliable high quality for you, the consumer!

”

Josef, the dairy cattle farmer



“

As a farmer, I have to know how my animals are doing. Daily documentation helps me to maintain an overview.

”

Rudolf, the pig breeder



“

My animals feel comfortable at all times – 24 hours a day. One of the main reasons for this is the centralised computer control for temperature, lighting and feeding!

”



**QS-live**  
INITIATIVE  
QUALITÄTSSICHERUNG



Finanziert mit Fördermitteln der Europäischen Union



Franz, the butcher



“

I can be pretty strict where meat and meat products are concerned – as head of production, I regularly check each individual production stage, because it's the quality that counts in the end!

”

Josef, the cattle breeder





Robert, the herb grower

“ We place very high demands, which is why we sort everything by hand, from basil to lemon grass. ”

The Rutta Family, the fruit growers

“ Fruit trees need the right climate and location! Only then do they get sufficient nutrients from the soil and enough water and light for a good harvest. ”



Peter, the vegetable grower

“ You have to observe nature to see what it’s trying to tell you. Earthworms, for example, only feel comfortable in good soil. ”



## Our commitment to safe food

Whether it’s fresh meat, fruit or vegetables, consumers want to know what ends up on their plates. The EU-funded campaign “QS-live. The quality assurance initiative” allows them to keep an eye on things – all the way from farm to shop.

On behalf of the more than 130,000 scheme participants, the members of the quality assurance initiative explain how they ensure tested quality and safe food every day.

[www.qs-live.de](http://www.qs-live.de)

Carsten, the vegetable producer

“ Hardly any chemical plant protection products are used in our business. We control most diseases and pests with their natural enemies. ”



“ I want my animals to be safe and well, so I put rubber mats down on the slatted floor of the calf shed. This doesn’t only enhance the comfort of the animals, it also improves their safety. ”



Jennifer, the apprentice

“ Fruit and vegetables have to be fresh, so I naturally take a really good look at them during inspection! ”



# Antibiotics monitoring Showing transparency for consumer protection

Within a very short space of time, the economic operators in the QS scheme have set up a practical instrument for the complete recording of the prescription of antibiotics in livestock farming. By doing so, they are making the use of antibiotics in pig and poultry production in Germany transparent.

Since 1 April 2012, all antibiotics prescriptions in the 2,600 poultry production businesses in the QS scheme in Germany have been recorded in a central database. Data recording in the 25,000 QS-certified pig production businesses began on 1 September 2012. More than 1,000 veterinarians and vets' practices enter all of the relevant data on antibiotics prescriptions into the database.

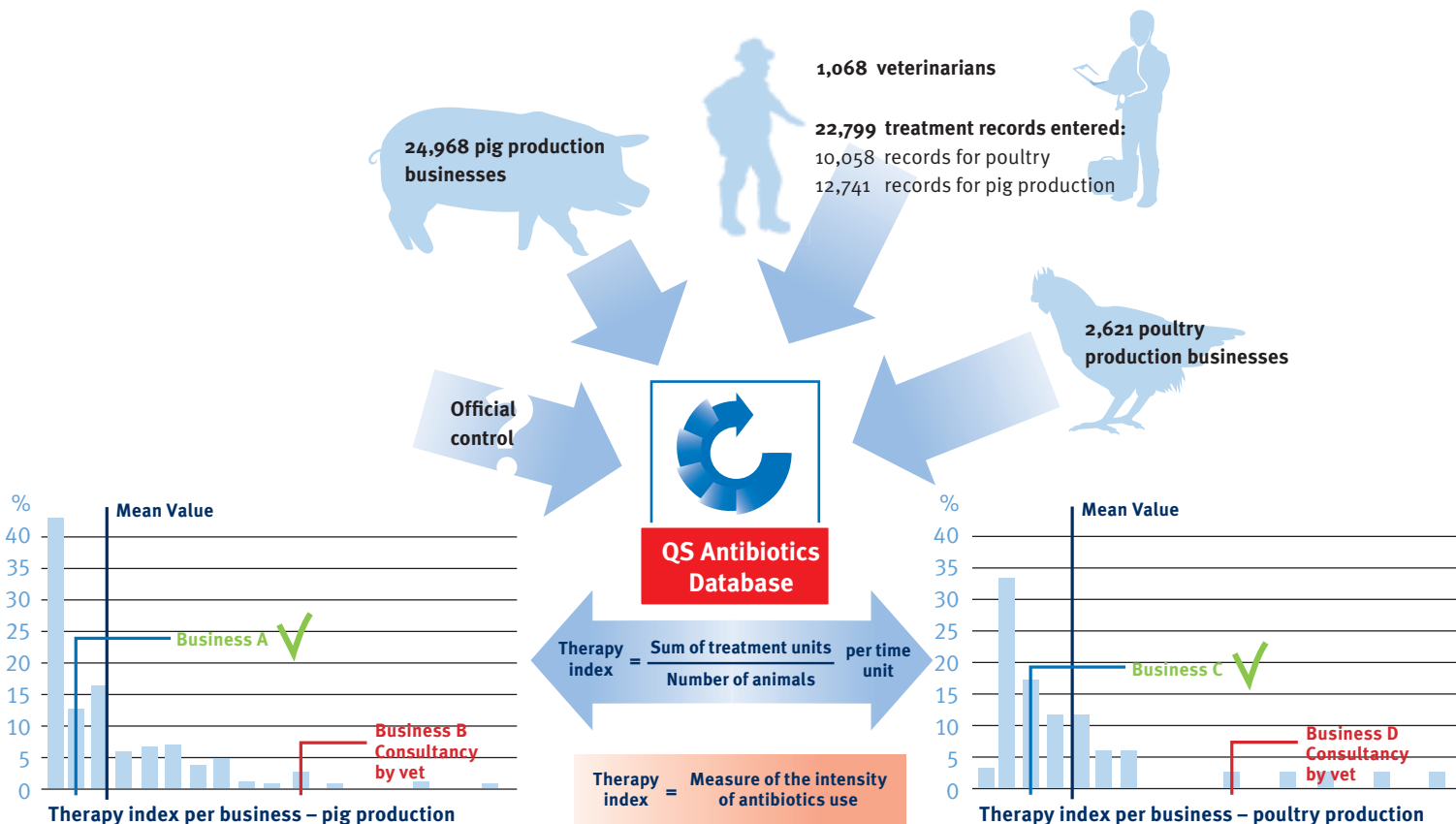
## Cross-company data basis reveals individual need for action

The data provide an overview of how many antibiotics are used in pig and poultry production and enable

a correct presentation of the current situation. By means of intercompany comparisons, farmers and veterinarians can compare their individual antibiotic use with anonymised data of others. Depending on their classification, farmers can check and implement measures to reduce their use of antibiotics.

## Keeping the effort low

The maintenance of the company data and entry of supplementary information on sheds and fattening groups and/or places for the agricultural businesses is the responsibility of the coordinators. The relevant data on antibiotics prescriptions is entered by the veterinarians. As this information already exists in electronic form in many vets' practices, automated interfaces have been set up to facilitate the transfer of the data to the antibiotics database.



As of: 1 March 2013



## “Data transfer at the push of a button”

Interview with Dr. Andreas Wilms-Schulze Kump, practicing veterinarian in Visbeck



Dr. Andreas Wilms-Schulze Kump  
Veterinarian

### What benefits can veterinarians draw from the centralised recording of data on the use of antibiotics?

*Through antibiotics monitoring, comparisons can be drawn with other vets' practices and that is of course of interest for our practice. In addition to this, we can gather important information for advising the businesses due to comparisons of farms, regions and fattening processes.*

### How do you integrate the monitoring into the daily routine of your practice?

*Several vets work in our practice. This means that our veterinary assistant has a lot to do until all of the antibiotics information has been entered into the database. An interface to our practice software will make this job easier once the data can be transferred at the push of a button.*

### What can poultry producers do to reduce their use of antibiotics?

*You could lecture for hours on this subject and indeed we do. The breed and quality of the chicks, for example, have an influence on the use of antibiotics in production businesses. These two factors are not the responsibility of the fattening farm, but depend on the breeder of the parent birds or the hatchery. Feed can have a special influence on the quality of the litter with regard to moisture, for instance. More antibiotics are usually required in damp stalls than in ones with dry litter.*

*The farmers themselves can influence the health of the herd or flock through management. Businesses and breeding companies issue guidelines on this which contain valuable recommendations. The floor should be pre-heated to 30° C, for example, before the chicks are housed in. The number of businesses that no longer need any antibiotics is getting bigger all the time. In our practice, we have been able to reduce the quantity of antibiotics by roughly 30 percent since 2010.*

“

Not much has changed in my daily routine since antibiotics monitoring was introduced. I still only use antibiotics when my animals are sick and my vet takes care of the data entry. I wonder how my business will do compared to others. Maybe the results will help me to optimise health management in my business even more. ”

Rudolf Platen  
Pig producer



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# Standard for logistics of fruit and vegetables

## Breaking the mould for seamless quality assurance

Consistent quality assurance doesn't stop at transshipment stores or truck loading bays. Each link in the supply chain must be able to rely on the others and for this reason, the economic operators in the QS scheme have developed a new standard. From this year, freight forwarders and transport companies can also obtain QS certification.

With the certificate, freight forwarders can document inspected logistical processes and compliance with all hygiene standards towards their customers. This, in combination with fast and comprehensive traceability of goods delivery channels, is the most important prerequisite for gapless quality assurance.

### Lean requirements catalogue

The requirements of the standard are summarised in the *Guideline Wholesale/Logistics*. They were specially tuned to fruit and vegetables logistics and focus on the areas of traceability and hygiene. Experienced auditors have tested the standard for its reliability and practicability. The result is a lean set of requirements which supports companies in the implementation of legally stipulated self-assessment.

The entire supply chain benefits from the additional commitment, all the way from the producer to the fruit and vegetables shelf.

### Documented processes and assured traceability

Checklists and supporting documents help companies to implement the requirements. Compliance is checked by independent certification bodies and documentation to this effect can be produced for presentation to customers. Traceability along the entire chain makes it possible to compile relevant information on deliveries quickly and comprehensively. In the event of an incident, this produces a clear picture of the flows of goods and actual situation on-site.

### Simple registration

Of particular importance during the development of the standard was to ensure that it could also be implemented by smaller companies with only a few employees. Double certifications are avoided, because the IFS Logistics Audit is entirely recognised by QS.



*"The Godeland company has been a QS scheme participant since 2005. Even today, our own logistics processes have been certified by the QS wholesale audit. With the new logistics standard, our freight forwarders can also have their compliance with the quality standards for*

*the transport of fruit and vegetables confirmed by an independent body."*

**Thomas von Levern**, Head of Quality Assurance, Godeland Vermarktungsgesellschaft mbH



*"The Nagel Group locations are certified against the IFS logistics standard, which means that they also satisfy the requirements of the QS standard for fruit and vegetables. We recommend certification against QS particularly to the smaller freight forwarders we work with. The lean requirements catalogue is specially tailored to the transport of fruit*

*and vegetables and takes into account the relevant themes of hygiene and traceability."*

**Hendrik Reinelt**, Head of Centralised Quality Management, Nagel Group

# Unannounced inspections

## Pointing the way to transparent processes



Since 2013, all companies in the meat and meat products supply chain allow themselves to be subjected to regular unannounced checks. Either the regular audits are now conducted without arranging a date in advance or the scheme participants conduct additional unannounced spot audits. In this way, the QS scheme makes a clear statement for transparency in food production.

The complete checklist is processed in unannounced regular audits. In spot audits, an additional, unannounced, shortened inspection which focuses on the operating processes is made between two regular audits.

Unannounced audits are nothing new for the scheme participants. In addition to the regular audits, several hundred unannounced random sample audits are made every year among the scheme participants. They are part of the scheme integrity system (SIKS). Over 95 percent of these audits show no irregularities and prove that the scheme participants work reliably even when an audit is not specifically scheduled.

### 1,300 spot audits in poultry production

A total of 1,297 unannounced spot audits were conducted in poultry production businesses in 2012. Even without any preparations, 77 percent of them complied with all of the requirements with no objections. Three businesses had their eligibility of delivery withdrawn due to severe violations against QS requirements. Sanction proceedings were initiated against them.

*“We place the very highest demands on the quality of our work and our feed. Comprehensive quality management systems are standard throughout the sector and are implemented with great sincerity. With the general introduction of unannounced audits in the QS scheme, we demonstrate that we are prepared to face an audit at all times. By doing so, we enhance the credibility of the entire sector.”*

**Michael Heiliger**, Managing Director  
Michael Heiliger GmbH & Co. KG



“As a poultry farmer, I am involved wholeheartedly and ensure every day that my flock is fit and well. It is important to me to convey this to the consumer. By achieving good results in unannounced spot audits, I provide evidence of my responsible work in black-and-white.”

**Rainer Wendt**  
Poultry Farmer



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## From the advisory boards The chairmen reply



Advisory Board Beef,  
Veal and Pork

**“Accentuate the main points together in an active dialogue”**

### **What dominated the work of the advisory board in 2012?**

*The Advisory Board Beef, Veal and Pork had to get involved intensively last year with the subject of animal welfare. At a special meeting in July, we discussed whether and how additional animal welfare criteria can be implemented above the legal standards. What is clear here is that there can only be more animal welfare on a voluntary basis. In addition to this, farmers have to receive financial compensation for the additional expense and effort.*

### **What were the most important resolutions passed in 2012?**

*With our decision to introduce unannounced audits in the QS scheme, we took an important step towards more transparency and reliability. From 2013, either regular audits will be conducted without prior notification or unannounced spot audits will be conducted in addition to scheduled regular audits. These spot audits focus mainly on the visual inspection of operating processes – above all animal welfare and hygiene – and the examination of traceability.*

*On top of this, we installed a monitoring programme for the recording of all antibiotics prescriptions in pig production within the QS scheme with effect from 1 September 2012. This will give us a proper overview of the use of antibiotics in pig production. Furthermore, the comparison of businesses should help farmers and vets to introduce measures which will further reduce the use of antibiotics.*



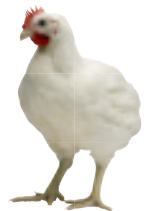
### **Where do you see the challenges for the QS scheme in 2013?**

*One of the main tasks will be to bring to life our resolutions from last year. We have to ensure that the value added by unannounced audits and antibiotics monitoring becomes clear to everyone both inside and outside the QS scheme. In addition, we have to actively continue the dialogue on animal welfare with everyone involved. We have to take the initiative here by ourselves.*

**Johannes Röring**, Chairman of the Advisory Board Beef, Veal, Pork and President of the agricultural association Westfälisch-Lippischer Landwirtschaftsverband e.V.



Advisory Board Poultry  
**“Justify consumers’ trust through transparent processes”**



### **What dominated the work of the advisory board in 2012?**

*The poultry industry turned word into actions in 2012. With its decision to introduce unannounced spot audits and an antibiotics monitoring, the advisory board for poultry made a decisive contribution towards further increasing transparency in poultry production.*

### **What were the most important resolutions passed in 2012?**

*One focal point of the work of the advisory board was the establishment of antibiotics monitoring. Within a very short space of time, we adopted a guideline in which the responsibilities as well as the type and extent of the data to be recorded are clearly regulated along with access rights. We initiated the build-up of an antibiotics database and clarified the funding. Only four months after the initial decision was made, we were able to start recording data on 1 April 2012.*

*With unannounced spot audits in 2012, the poultry industry reached yet another milestone. From 2013, unannounced audits will be conducted on all stages of the Supply Chain Meat and Meat Products. Clarification of how unannounced audits are to be organised and the embedding of these principles in the inspection system dominated our work in 2012.*

**Where do you see the challenges for the QS scheme in 2013?**

*Even in 2012, we dealt with the topics of animal health, protection and welfare at two special meetings. With our initiative “Animal Welfare in Poultry Production”, we have pushed ahead with the discussion on the implementation of additional animal welfare criteria. The step-by-step integration of these criteria into the QS guidelines is one of the greatest challenges for the current year. We are currently working on concepts to show how higher demands on farmers and slaughtering businesses can be implemented without resulting in financial disadvantages or shifts in the market.*

**Werner Hilse**, Chairman of the Advisory Board Poultry and Vice-President of the German Farmers' Association *Deutscher Bauernverband e.V.*

Advisory Board Fruit,



Vegetables, Potatoes  
**“Continuous further development of the scheme – expansion of the product availability”**



**What dominated the work of the advisory board in 2012?**

*The topic of microbiology has gained significance with fruit and vegetables in recent years. Against this background, we had another critical look at the supply chain in 2012 – in particular processing and transport – and evaluated jointly the points at which further improvements can be made in order to reduce the risk of microbiological contamination.*

**What were the most important resolutions passed in 2012?**

*We developed our own standard for logistics companies in order to substantiate the requirements on storage and transport and ensure the traceability of the products at all times during transport. If companies are already certified in accordance with the IFS Logistics standard, there is no additional expense or effort as this standard is recognised by QS.*

*We also decided last year that the results of microbiological monitoring should be recorded via the QS database in line with the preparation guideline. In this way, we gain an overview of the test results by product group so that we categorise the risk, for example.*

**Where do you see the challenges for the QS scheme in 2013?**

*With the help of the monitoring programme, we will obtain more knowledge of microbiological contamination by product group. We will have to thoroughly analyse the data obtained here for unprocessed products too and look for ways to further reduce possible risks.*

*We would also like to expand the all-year availability of products from the QS scheme and to this end, we will have to expand cooperation with other quality assurance standards in each of the countries of origin.*

**Ulrich Schopohl**, Chairman of the Advisory Board Fruit, Vegetables, Potatoes and Area Manager for Strategic Quality Assurance with the REWE Group





# From the supply chains 2012

## The concrete implementation of quality assurance

### Qualification for critical processes in feed production

Manufacturers and processors who produce feed in risky manufacturing processes are being controlled by specially trained auditors since 2013.

The so-called critical processes include the manufacture of protected or refined vegetable fats and oils, refined and distilled fatty acids, salts of fatty acids, fish oil, plant glycerine and raw plant glycerine, as well as blended fats/oils and mixed fatty acids. The extended requirements, which were tightened in early 2011 as a result of the dioxin incident, take into account the higher risk involved in the manufacture of these products.

In October 2012, 20 QS auditors deepened their knowledge in the fat and oil processing industry in a separate training course. They are now eligible to audit special manufacturing processes in the feed sector.

### Registration of VVVO numbers to ensure clear evidence of origin

The traceability requirements in the QS scheme were last extended after the experiences made in the dioxin incident at the beginning of 2011. Among other things, since 2012 all deliveries of bulk compound feed must be clearly allocated to the agricultural business that received the delivery. To this end, the compound feed manufacturer or trader documents the Livestock Transport Regulation Number (VVVO number) on the shipping documents.

All companies are obliged to ensure the traceability of their products. In addition to legal requirements, they must set up processes in the QS scheme which enable them to compile information on the procurement of goods in line with fixed timeframes. In the feed sector, meat industry and food retail sector, it must be possible to obtain this information within four hours and pass it on to QS the same day if requested.





### Standard work instructions for animal welfare officers

Since 2013, it has been checked during QS audits in abattoirs if standard work instructions for animal welfare officers are on hand. The responsibilities of the animal welfare officer must be clearly defined in these standard work instructions which are intended to ensure that all animal welfare provisions are fully implemented in a uniform manner. They focus on the circumstances of the businesses and should be prepared on the basis of risk, i.e. the animal welfare officer has to look most closely where the risk of deviation is greatest.

The animal welfare officer is responsible for operative animal welfare before and during the slaughtering process. He or she checks that staff work correctly and that all anaesthetic equipment is in perfect working order. Every abattoir must appoint an animal welfare officer to check compliance with animal welfare requirements during slaughtering. This requirement, which has already applied to QS-certified companies for more than ten years, has now been embedded in the regulation on the protection of animals at the time of killing (Regulation (EC) No. 1099/2009).



### Piglet castration without anaesthetics to end in 2019

The common goal of the economic operators is to dispense with piglet castration completely as soon as possible (Düsseldorf declaration of 28 September 2008). With the amendment to the animal welfare act adopted in February, a legal ban on piglet castration without anaesthetics is to come into force from 2019. Among other things, the coordination platform for the renunciation of piglet castration moderated by QS agreed last year to prepare a **practical manual with tips on the husbandry and feeding of entire male pigs**. It is intended to facilitate the first steps into entire male production for farmers. The *QS Guideline Slaughtering/Deboning* was supplemented on 1 July 2012 to include requirements for the identification of carcasses with boar taint by means of the human nose. Accordingly, businesses which slaughter entire male pigs must establish procedures which enable the reliable identification of tainted carcasses. Within the QS scheme, male piglets may only be castrated using analgesics since 2009.



## More risk businesses in salmonella monitoring

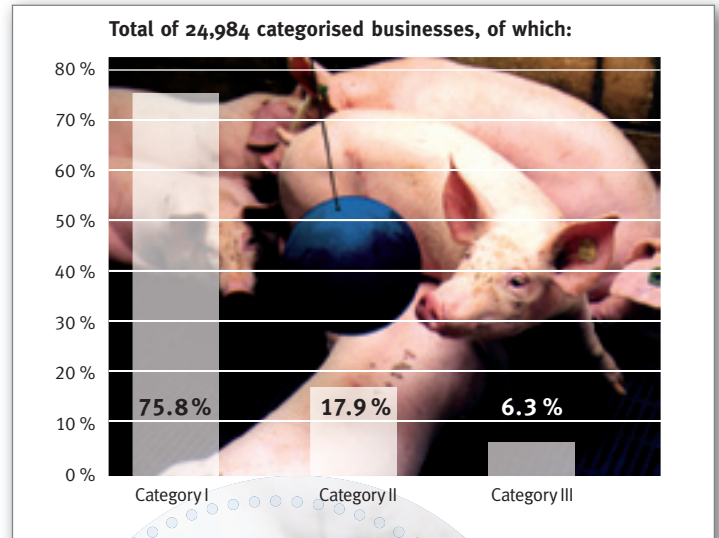
Monitoring programmes serve to classify risks and establish developments and trends. Contrary to the long-term trend, an erratic increase in the number of risk businesses has been observed in salmonella monitoring since the middle of 2012. Similar developments are also being reported from the Netherlands, Denmark and the UK. The reasons have not yet been analysed sufficiently, but it is presumed that changes in feeding due to increased feed cost, as well as the quality of cleaning and disinfection measures have an influence. The experts in the QS committees are consulting on the causes and possible countermeasures.

The number of pig production businesses from which there is a risk of the entry of salmonella into the meat production chain had decreased continuously in recent years. The variety of measures which farmers and veterinarians implemented jointly to lower salmonella contamination in pig production businesses showed an effect.

As stipulated in the salmonella regulation, every pig production business in the QS scheme must have up to 60 samples examined every year. With 25,000 categorised businesses, this totals more than **1.7 million meat juice or blood samples a year**. Businesses in which over 40 percent of the samples are positive are classed in Category III (high salmonella risk) and must initiate countermeasures. Three quarters of all businesses are classed in Category I (low salmonella risk).

The current goals in the further development of salmonella monitoring include the reduction of limit values, a changed procedure for the categorisation of pig production businesses and the inclusion of sows in salmonella monitoring.

## Salmonella monitoring remains an important topic



As of: 1 March 2013



*“Despite state-of-the-art technology, foreign matter cannot be reliably traced in meat by mechanical means and reliable prevention is therefore urgently required. As this is a communal task, all stages of food production are involved in the working group on foreign matter in meat. In the first step, a negative list for unsuitable material for activity, which has been part of the Agriculture Pig Farming Guideline since 2012, was included in QS. The constructive work has to be continued and above all, the information and/or sensitisation of everyone involved further intensified. The awareness that the agricultural sector produces food already has to be expanded further in order to ensure that our food is handled responsibly in the best interests of the consumer.”*

**Sarah Dhem**, Managing Director Werner Schulte GmbH & Co. KG



## Work groups promote further development

QS is seeking the advice of scheme participants, scientists and other experts in the further development of the guidelines. The advisory boards are responsible for the determination of requirements in the QS scheme with the additional support of various work groups who make concrete recommendations for the further development of the guidelines.

In the **poultry work group**, additional requirements for catching poultry were prepared last year and were subsequently discussed and adopted by the advisory board.

The **salmonella monitoring work group** dealt with the alternative categorisation of pig production businesses in accordance with their salmonella status. There were intensive discussions in the **antibiotics monitoring work groups**.

The **feed work group** is organised by the associations in the feed sector. The experts from the companies prepare the documents for the advisory boards and consult on the feed monitoring control plans among other things.

Other work groups are set up for specific reasons or at the initiative of the economic operators. Since November 2011, industry representatives and veterinarians have been dealing with the question of how metal parts in meat and cold cuts can be better identified and avoided in the **foreign matter in meat work group**.

## QS SIKS – Scheme Integrity System

The work of auditors, certification bodies and laboratories, as well as the modus operandi of the QS scheme were scrutinised in 2012 in 478 audits. More than 300 **unannounced random sample audits** were conducted among the scheme participants in 2012. They were intended to show whether scheme participants also work reliably when they are not expecting an audit. The result is pleasing: there were no negative findings in 96.5 percent of the audits and K.O. evaluations only had to be given to eleven scheme participants.

The picture is slightly different for the **audits of special purpose** conducted in substantiated cases of suspicion or for clarification in incident and crisis management where the proportion of K.O. audits amounted to a good 20 percent.

The work of the auditors was verified in 2012 in **parallel and witness audits** in which specially trained auditors accompany regular audits or conduct staggered checks of audit results.

The uniform evaluation of QS requirements is to be achieved in this way. Although the majority of auditors performed well, five of them lost their approval for the QS scheme either temporarily or permanently as a result of an audit of this kind. QS also checks the correct implementation of the inspection system on-site at **laboratories and certification bodies**. Corrective measures had to be taken here in several places, but approval was never in jeopardy at any inspection institute.



“All good things come in threes, and this also applies to controls in the QS scheme. The basis is formed by regular self-assessments by each company. On the second level, independent auditors check with the scheme participants on-site whether the QS requirements have been complied with. On the third level, the work of the auditors, certification bodies and laboratories is monitored in the scheme integrity system.”

Lore Mauler  
LandFrau



QS-live  
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## On the road to success in southern Europe

To be able to offer fresh fruit and vegetable products with the QS certification mark all year round in the German food retail international cooperation is required. Interest in the QS scheme is particularly great in the Spanish procurement market. Since the beginning of 2012, the number of QS-approved fruit and vegetable producers from Spain has risen by more than half, and the number of Spanish wholesalers in the QS scheme has more than doubled within the same period.

To promote the exchange of experiences with Spanish scheme participants, QS organised a **workshop in Valencia** for the first time in 2012. The event was conducted in Spanish so that the total of 60 participants could find out about the practical implementation of QS requirements without any language barriers. In direct discussions, questions on sampling within the scope of residue monitoring were clarified and tips and tricks were given on how to work the QS database.

Five Spanish certification bodies have already registered themselves for the conducting of independent audits in the QS scheme. To notify the auditors about the contents of the QS scheme and ensure the uniform quality of the audit evaluations, **auditor training was held in Spain** for the first time in March 2013.

## QAC – Scheme participants collect 9,000 analysis results

Participants in the QS scheme became heavily involved in a monitoring programme for the quaternary ammonium compounds (QAC) benzalkonium chloride (BAC) and didecyltrimethylammonium chloride (DDAC). Since July 2012, a total of **8,897 analysis results** were conveyed to QS. These were then handed over to the **Federal Office of Consumer Protection and Food Safety (BVL)** and **Federal Institute for Risk Assessment (BfR)** in anonymised form at the end of February 2013.

Positive and negative findings were recorded for products from Germany and abroad. Analysis results for more than 100 different fruit and vegetable products from more than 60 countries were collected. In 85 percent of the 4,740 analyses for BAC, no residues of the disinfectant were found. Of the 4,157 tests for DDAC, 83 percent were residue-free. The reason behind the monitoring programme is the requirement contained in Regulation (EU) No. 396/2005 to establish a final Maximum Residue Level (MRL) for BAC and DDAC. The currently valid temporary MRLs of 0.5 mg/kg were established by the EU Commission in July 2012 in response to increased detection of residues of quaternary ammonium compounds in fruit and vegetable products. The anonymised data QS passed on to the BfR in July 2012 helped to form the basis of the quickly formulated edict.

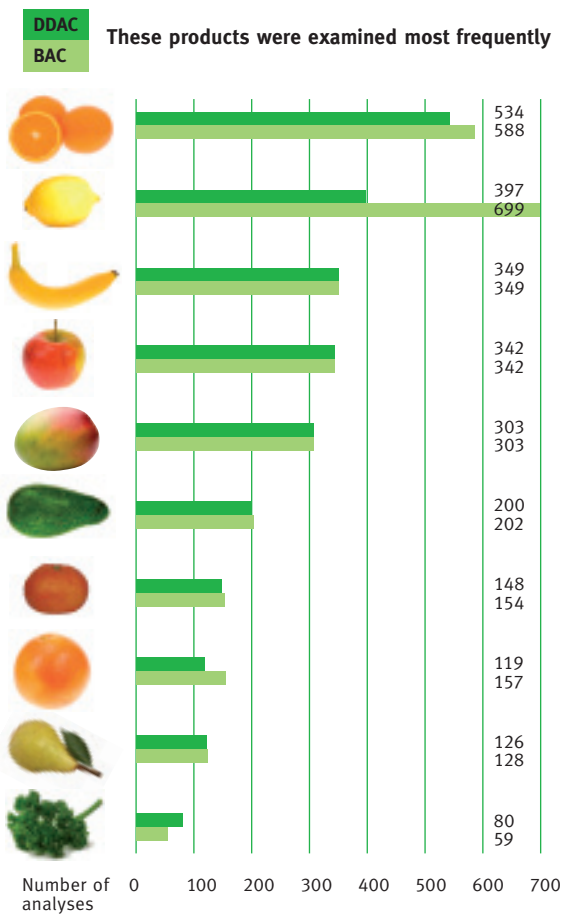


*"I acquired a lot of new information at the training course. It was particularly helpful that we were able to discuss our issues directly with the QS personnel. This allowed us to deal with the peculiarities of Spanish production."*

**Teresa Zaragozá**, employee in the "Quality" area at Kippenberg Frutas







## Residue analysis in Laboratory Performance Assessment

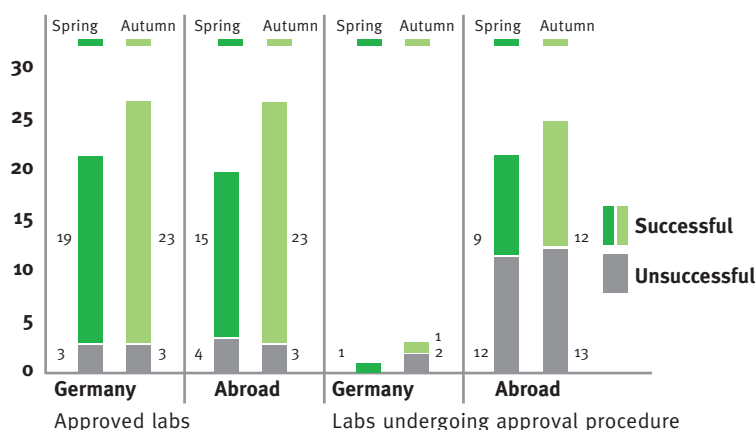
In order to maintain their QS approval, laboratories have to ensure that their analysis methods comply with the latest standards at all times. To ensure that laboratories that have already been approved cannot rest on their laurels, the laboratory performance assessments which are conducted twice a year are subject to constant further development.

In the **spring test 2012**, the participants had to test prepared orange samples for residues. Pears were chosen as the test material for the **autumn test**. Both of these products pose a challenge to residue analysis as product-related misinterpretations can easily occur which only experienced and competent lab personnel can recognise and exclude. The analysis methods are put to the test by either using new active substances or ones which caused problems in previous tests.

A total of 63 laboratories (spring) and 80 (autumn) participated in the laboratory performance assessments in 2012. Roughly 70 percent were successful in each instance. The remaining participants had to make improvements, but none of the labs approved within the QS scheme had to have their important QS approval withdrawn.

For laboratories which are still going through the approval procedure, the performance assessment is still a big challenge which more than half of them fail to meet. By way of comparison, the **success rate among QS-approved laboratories is over 80 percent**. Seven labs passed the approval procedure in 2012 and are now entitled to conduct residue analyses in the QS scheme. There is great interest in QS-approval in foreign countries in particular where the demand for high-quality residue analysis is on the rise due to the increasing number of scheme participants.

## Participants in laboratory performance assessments in 2012



*“For us in the retail sector, laboratory approval by QS is hugely important. We have to rely on high-quality and correct residue analyses. If labs have QS-approval, we know that they can analyse to a high standard and that they are inspected regularly.”*

**Oliver Dobusch**, National Quality Assurance Representative with Kaiser's Tengelmann GmbH

## Microbiological Monitoring

Since January 2012, QS-certified producers of fresh-cut salads and other prepared fruit and vegetable products have been implementing microbiological monitoring in line with the provisions of the *Guideline Preparation*. The purpose of this is to recognise and eliminate where possible the contamination with pathogenic microorganisms of products which are particularly susceptible due to their many cut surfaces.

A database module is being set up in the QS scheme to centrally record and evaluate the results of the product tests. Specific hazards can be recognised and critical products identified on the basis of the evaluation results. This enables the generation of fast and comprehensive information which is particularly helpful in times of crisis.

Other requirements are formulated in the *Guideline Preparation* in addition to the obligation to implement microbiological monitoring. These deal with the HACCP concept, for example, as well as personal and equipment hygiene and product packaging.

Scheme participants receive assistance with the implementation of the requirements formulated in the *Guideline Preparation* through the **Supporting Document Microbiology** which provides an overview of the microorganisms relevant to fruit and vegetables and gives tips on sampling and how to reduce microorganisms.

## Cooperations and agreements with other standard owners

Those involved in the supply chain must be able to rely on one another, even across national frontiers. QS has concluded **fourteen bilateral agreements** with other European standard owners. These contribute towards the reliable availability of products with the QS certification mark in the German food market.

With recognition of the Irish “Beef and Lamb Quality Assurance Scheme (BLQAS)”, the first international agreement in the field of beef production was signed in 2012. Since then, companies certified in accordance with the Bord Bia standard have the opportunity to market beef in the QS scheme. They do not require a separate QS audit for this but become QS scheme participants.

The agreement between QS and Belpork vzw as the standard owner of the Belgian Certus test mark which has existed since 2004 was extended by a further year in 2012. In addition to the inclusion of livestock transport and the establishment of antibiotics monitoring for all pig farming businesses in the Certus scheme, it was agreed that from the



“Every year since 2006, I have been subjected to a QS-GAP audit in which the QS criteria as well as the requirements of the GlobalG.A.P standard are checked in one audit so that I can deliver my goods into both schemes.”

Carsten Knodt  
Vegetable Grower



QS-live  
INITIATIVE  
QUALITÄTSSICHERUNG



Finanziert mit  
Fördermitteln  
der Europäischen  
Union

beginning of the year, Certus businesses can also market sow meat in the QS scheme. The update of other agreements is scheduled for 2013.

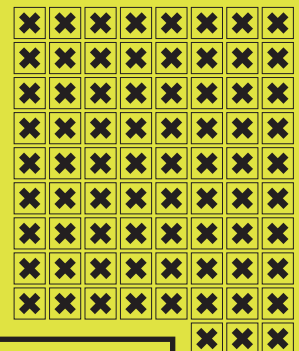
QS and five other European standard owners adopted common principles for fruit and vegetable production within the scope of the European Network for Fruit and Vegetables (A-NET). Productschap Akerbouw from the Netherlands was accepted into A-NET as an additional participant in 2012.



## Incident and Crisis Management required in 76 cases

The economic operators along the Supply Chain Meat and Meat Products, as well as fruit, vegetables and potatoes had their work cut out for them in 2012 where incident and crisis management were concerned. Together with QS head office, they initiated and implemented measures to remedy incidents or to prevent or avert possible hazards in 76 cases. A further 35 incidents were added in the first quarter of 2013.

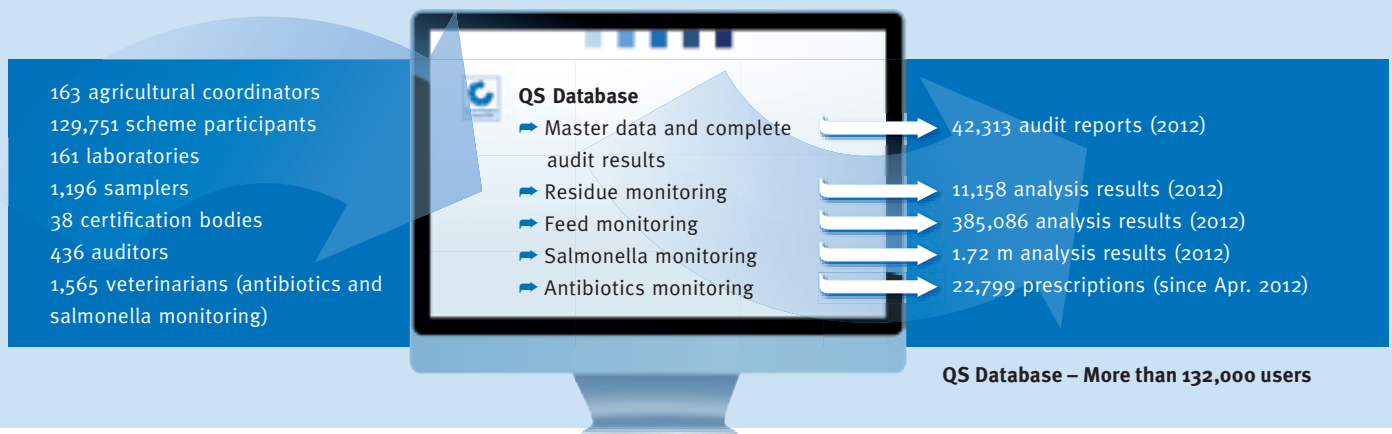
The increasing number of reported incidents is due on the one hand to the sensitisation of the economic operators. In particular the dioxin incident and EHEC crisis of 2011 made it clear how important company and cross-company crisis management is. On the other hand, the reason is to be found in the improved recording of incidents. All incidents and crises since January 2012 have been systematically recorded, processed and communicated to the members of the crisis management circle in the QS crisis diary. In the event of a crisis, QS Crisis Management can fall back on the knowledge of well-informed experts from companies and associations who are all linked together.



## QS database – service range and functionalities expanded

The QS database as the key element of all interactions contains not only the master data of all scheme participants but also the results of the independent audits and monitoring programmes. 129,751 scheme participants, 163 agricultural coordinators and 436 auditors access the data records just as regularly as the staff of the 38 certification bodies and 161 QS-recognised laboratories. The database is updated constantly in order to guarantee the greatest possible level of user-friendliness and practicability. Since the beginning of the year, it has been possible to download the checklists for the independent audits as Excel files. This gives auditors the option of completing the

checklists directly at a computer without internet access and uploading them subsequently back into the database. This means that manual transfer of the paper checklist is no longer required. Overview lists from customers and suppliers which can be compiled individually offer additional convenience for scheme participants. Whoever prepares a list of this kind receives a message automatically if a company in the list loses its eligibility of delivery. Additional automated plausibility checks for the entry of analysis results in feed and residue monitoring have been set up on top of this.



## QS in a dialogue... ... at fairs and events

In 2012, QS again sought an active dialogue with consumers and an exchange of experiences within the sector. In spring, the EU-sponsored information campaign “QS-live. Quality Assurance Initiative” was introduced at the Fruit Logistica fair. In autumn, QS made a joint presentation with Fleischprüfing and QAL at the Central Agricultural Festival (ZLF) in Munich. With presenting QS-live at the Eat&Style and Food&Life consumer fair, QS explored new avenues by allowing consumers to demonstrate their knowledge of how to handle fresh foods in an



interactive quality manager game. Together with Kaiser’s Tengelmann, their trading partner of many years, QS was represented at the International Green Week in Berlin in January 2013. In a rally with an entertaining presenter, more than 2,000 fair visitors tested their knowledge of all aspects of the QS scheme.



### ... in the internet

QS has improved the **range of information for auditors**. The newly designed closed area on the QS homepage has been customised to suit the requirements of auditors. In addition to information on training course contents and circulars, a special news area provides comprehensive and updated information on all developments in the QS scheme. A comments function facilitates a direct exchange. Training and information material on the subject of quality assurance within the QS scheme have been offered since 2012 in the **QS knowledge portal**. The contents have a modular concept and are split into different topics which can be compiled individually and used in vocational training or staff training.

### ... in the social media

In an exchange with scheme participants and consumers, QS also uses the so-called new media. In the **QS blog** ([www.qs-blog.de](http://www.qs-blog.de)), scheme participants are provided with valuable background information on current topics along with tips on the implementation of QS requirements. The articles can be discussed and commented on in the internet. Interested parties can also keep up with the latest news from the QS scheme in **Twitter** (@QS\_System).

### ... at the point of sale

The staff in the food retail sector are important partners for QS as a direct interface to the consumer. To ensure that they can give their customers the right answers, QS organises training for specialised advisers and sales personnel and introduces itself at commodity exchanges. In consumer communication, QS collaborates with food retailers to develop informative flyers and website content on the QS scheme.



“ As a QS-live ambassador, I am the face on the cover of the Grips&Co sales training guide for quality assurance. In the information brochure, which is aimed specifically at trainees in the food retail sector, it is explained how quality assurance for meat, fruit and vegetables works in the QS scheme. It also gives many practical tips on routine daily work. ”

**Jennifer Bauder**  
Apprentice in the food retail





# Facts and Figures Supply Chain Meat and Meat Products

## Participant numbers

Number of scheme participants in the Supply Chain Meat and Meat Products in March 2013

Stage	Total		Germany		Other countries	
	Number	Change over previous year	Number	Change over previous year	Number	Change over previous year
<b>Total</b>	<b>105,071</b>	<b>-1,177</b>	<b>97,164</b>	<b>-1,687</b>	<b>7,907</b>	<b>+510</b>
<b>Feed Sector</b>	<b>3,564</b>	<b>+ 301</b>	<b>3,102</b>	<b>+ 234</b>	<b>462</b>	<b>+ 67</b>
· Feed material <sup>1,2</sup>	1,135	-1	1,024	- 30	111	+ 29
· Compound feed <sup>3</sup>	1,327	+75	1,048	+ 57	279	+ 18
· Trade, transport, storage <sup>4</sup>	1,102	+227	1,030	+ 207	72	+ 20
<b>Agriculture</b>	<b>75,541</b>	<b>- 1,583</b>	<b>68,601</b>	<b>- 1,974</b>	<b>6,940</b>	<b>+ 391</b>
· Cattle farming <sup>5</sup>	30,236	-359	30,235	- 354	1	- 5
· Pig farming <sup>6</sup>	41,174	-1,396	35,770	- 1,755	5,404	+ 359
· Poultry production	4,131	+ 172	2,596	+ 135	1,535	+ 37
<b>Livestock Transport</b>	<b>1,741</b>	<b>+ 41</b>	<b>1,610</b>	<b>- 4</b>	<b>131</b>	<b>+ 45</b>
<b>Slaughtering/Deboning <sup>7</sup></b>	<b>439</b>	<b>+ 43</b>	<b>392</b>	<b>+ 38</b>	<b>47</b>	<b>+ 5</b>
<b>Butchery</b>	<b>68</b>	<b>+ 14</b>	<b>68</b>	<b>+ 14</b>	<b>-</b>	<b>-</b>
<b>Processing</b>	<b>265</b>	<b>+ 4</b>	<b>254</b>	<b>+ 2</b>	<b>11</b>	<b>+ 2</b>
<b>Food Retail <sup>8</sup></b>	<b>23,453</b>	<b>+ 3</b>	<b>23,137</b>	<b>+ 3</b>	<b>316</b>	<b>-</b>

<sup>1</sup> Further 289 businesses eligible to deliver due to GMP certification (+105)

<sup>2</sup> Including 52 additive and premix production (+27)

<sup>3</sup> Including 527 mobile feed milling and mixing plants (-4)

<sup>4</sup> Further 3,430 businesses eligible to deliver due to GMP certification (+2,223)

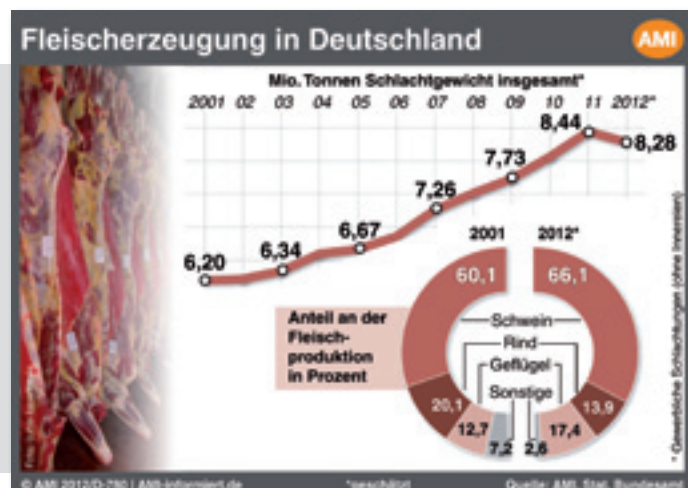
<sup>5</sup> Further 32,038 businesses eligible to deliver slaughter cows due to QM-milk auditing (+2,824)

<sup>6</sup> Further 7,454 QSG businesses (DK) (+11) and 2,144 Certus businesses (B) (-30) with eligibility of delivery due to bilateral agreements

<sup>7</sup> Further 14 QSG businesses (DK) (-1) and 43 Certus businesses (B) (-14) with eligibility of delivery due to bilateral agreements

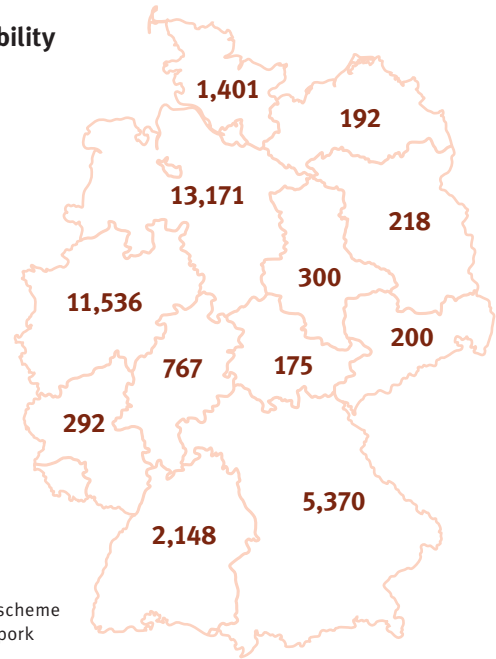
<sup>8</sup> Including 145 meat wholesale companies

## Meat production in Germany



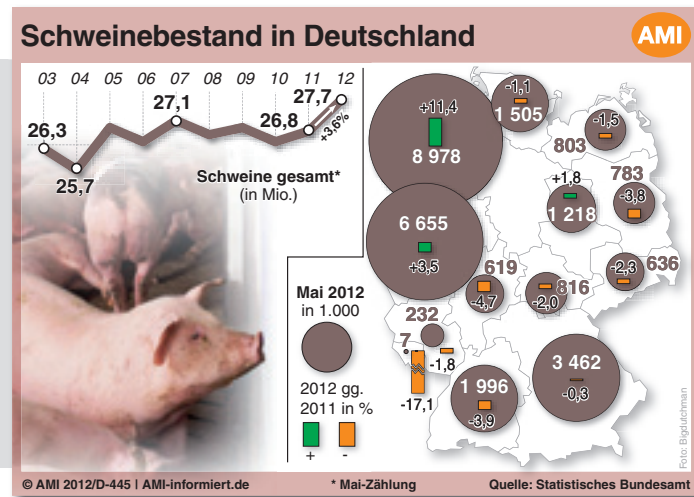
**Number of pig farming businesses with eligibility of delivery in the QS scheme in March 2013**

<b>Total</b>	<b>50,772</b>
<b>Germany</b>	<b>35,770</b>
<b>Other countries</b>	<b>15,002</b>
Netherlands	4,070
Denmark	7,454 <sup>1</sup>
Belgium	3,383 <sup>2</sup>
Luxembourg	54
France	5
Spain	32
Czech Republic	2
Slovakia	2



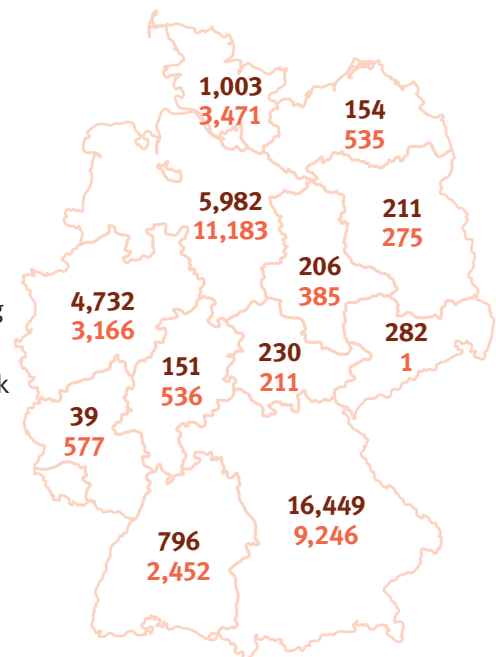
<sup>1</sup> Eligible to deliver pigs and pork due to recognition of QSG scheme  
<sup>2</sup> Incl. 2,144 businesses with eligibility of delivery for pigs and pork due to recognition of Certus scheme

**Pig stocks in Germany**



**Number of cattle farming businesses with eligibility of delivery in the QS scheme in March 2013**

- 30,235 scheme participants cattle farming
- 32,038 businesses with eligibility of delivery for slaughter cows due to QM-Milk auditing



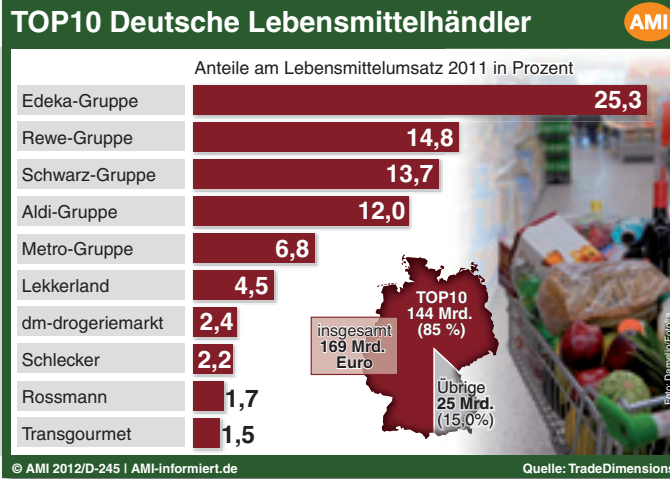
## Audit results

A total of 30,138 regular audits were conducted in 2012 in the Supply Chain Meat and Meat Products. 98 percent of them were passed immediately. 610 scheme participants failed their regular audit and will have to implement corrective actions in order to receive QS approval. With 3.3 percent, the proportion of K.O. evaluations in unannounced random sample audits was only slightly higher than in the regular audits. In audits of special purpose, on the other hand, which are only conducted in cases of definite suspicion or in incident or crisis situations, the share of K.O audits lay at 19 percent.

### Number of regular audits and K.O. evaluations in the Supply Chain Meat and Meat Products in 2012 and 2011

Stage	2012		2011	
	Number	of which K.O. / no approval	Number	of which K.O. / no approval
<b>Total</b>	<b>30,138</b>	<b>610 (2.0%)</b>	<b>29,617</b>	<b>674 (2.3%)</b>
<b>Feed Sector</b>	<b>1,361<sup>1</sup></b>	<b>47 (3.5%)</b>	<b>1,828</b>	<b>73 (3.9%)</b>
<b>Agriculture</b>	<b>21,896</b>	<b>200 (0.9%)</b>	<b>20,878</b>	<b>115 (0.6%)</b>
· Cattle farming	7,434	66 (0.9%)	8,607	25 (0.3%)
· Pig farming	12,864	110 (0.9%)	10,763	70 (0.7%)
· Poultry production	1,598	24 (1.5%)	1,508	20 (1.3%)
<b>Livestock Transport</b>	<b>341</b>	<b>1 (0.3%)</b>	<b>326</b>	<b>1 (0.3%)</b>
<b>Slaughtering/Deboning</b>	<b>253</b>	<b>3 (1.2%)</b>	<b>197</b>	<b>9 (4.6%)</b>
<b>Butchery</b>	<b>157</b>	<b>8 (5.1%)</b>	<b>173</b>	<b>2 (1.2%)</b>
<b>Processing</b>	<b>130</b>	<b>-</b>	<b>107</b>	<b>1 (0.9%)</b>
<b>Food Retail</b>	<b>6,000</b>	<b>351 (5.9%)</b>	<b>6,108</b>	<b>473 (7.7%)</b>

<sup>1</sup> Of which 394 inspections (small scale feed material producers and mobile feed milling and mixing plants)



## Top 10 German food retailers

## Number of Regular Audits and frequent C/D/K.O. evaluations in the Supply Chain Meat and Meat Products in 2012

Stage	No. of regular audits	Requirement	No. of evaluations		
			C	D	K.O.
<b>Feed Sector</b>	1,361 <sup>1</sup>	<ul style="list-style-type: none"> <li>Compliance with the QS control plan</li> <li>Use of certification mark</li> <li>Incident and crisis management</li> </ul>	173 111 109	1	30 2
<b>Agriculture</b> Cattle farming	7,434	<ul style="list-style-type: none"> <li>Veterinary care contract</li> <li>Implementation of stock husbandry</li> <li>Implementation and documentation of self-assessments</li> </ul>	455 405 201		18 41 28
Pig farming	12,864	<ul style="list-style-type: none"> <li>Sty Fittings and appliances</li> <li>Shed floor requirements</li> <li>General farming requirements</li> </ul>	1,408 1,398 1,234	136 46	8
Poultry production	1,598	<ul style="list-style-type: none"> <li>Biosafety measures</li> <li>Building and equipment</li> <li>Plant hygiene</li> </ul>	170 127 125	7 10 5	
<b>Livestock Transport</b>	341	<ul style="list-style-type: none"> <li>Implementation and documentation of self-assessments</li> <li>Disinfection control book</li> </ul>	21 6	1	1
<b>Slaughtering/ Deboning</b>	253	<ul style="list-style-type: none"> <li>Technical/structural condition of building and equipment</li> <li>Timely and effective implementation of corrective actions</li> <li>Hygiene sluice</li> </ul>	67 33 25	1	0 0
<b>Processing</b>	157	<ul style="list-style-type: none"> <li>General conduct regulations</li> <li>Foreign matter management</li> <li>Documentation of company data</li> </ul>	13 11 9	0 2	1
<b>Food Retail</b>	6,130 <sup>2</sup>	<ul style="list-style-type: none"> <li>Room, plant, equipment hygiene</li> <li>Information/training on the QS scheme</li> <li>Incoming goods inspection</li> </ul>	484 267 306	40 242	128

<sup>1</sup> Of which 394 inspections (small scale feed material producers and mobile feed milling and mixing plants)

<sup>2</sup> Of which 130 meat wholesale audits

## Sanction procedures

155 of the 279 sanction cases negotiated in the sanction board in 2012 involved the Supply Chain Meat and Meat Products. In 30 cases, the board merely issued a warning. Contractual penalties of up to 5,000 euros were imposed in a total of 103 cases. In 22 cases, temporary suspension or an increased audit frequency were imposed in addition to a fine.

### Sanction procedures in the Supply Chain Meat and Meat Products in 2012 and 2011

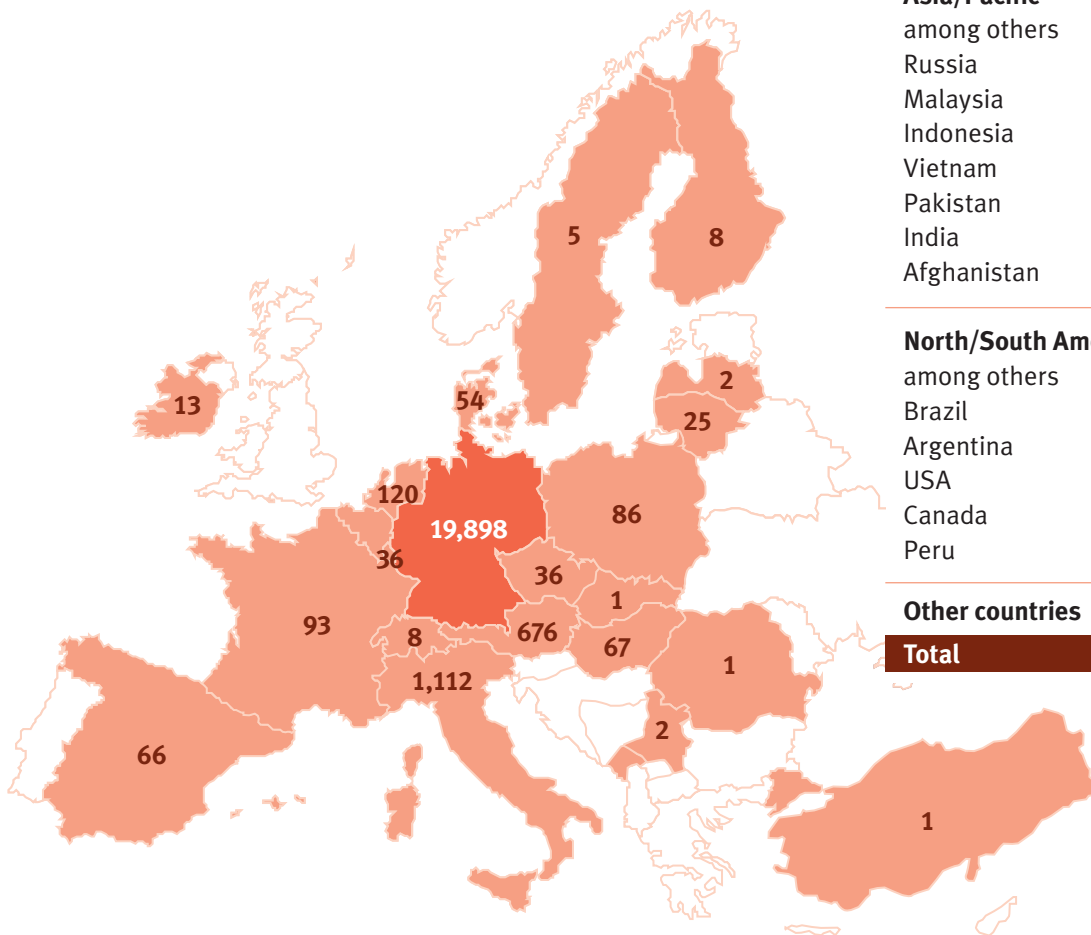
	2011	2012	
<b>Sanction cases</b>	<b>152</b>	<b>155</b>	<b>Extract of K.O. evaluations</b>
<b>Feed Sector</b>	<b>30</b>	<b>17</b>	<ul style="list-style-type: none"> <li>· Implementation of feed monitoring (control plan, lab selection, data entry)</li> <li>· Labelling and declaration of feeds</li> </ul>
<b>Agriculture</b>	<b>78</b>	<b>122</b>	<ul style="list-style-type: none"> <li>· Monitoring and care of livestock</li> <li>· Compliance with livestock density</li> </ul>
· Cattle farming	17	23	<ul style="list-style-type: none"> <li>· Piglet castration</li> <li>· Material for activity</li> </ul>
· Pig farming	48	76	<ul style="list-style-type: none"> <li>· Implementation of corrective actions</li> <li>· Feed/piglet procurement</li> </ul>
· Poultry production	13	23	<ul style="list-style-type: none"> <li>· Documentation (self-assessment, stock register, medicines, veterinary stock care)</li> </ul>
<b>Slaughtering/Deboning</b>	<b>11</b>	<b>6</b>	<ul style="list-style-type: none"> <li>· Compliance with animal welfare provisions (anaesthesia, electrical driving aids, animal welfare officer)</li> <li>· Separation of goods</li> </ul>
<b>Processing</b>	<b>1</b>	<b>2</b>	<ul style="list-style-type: none"> <li>· Labelling of QS goods</li> </ul>
<b>Meat Wholesale</b>	<b>2</b>	<b>1</b>	<ul style="list-style-type: none"> <li>· Compliance with product temperature</li> </ul>
<b>Food Retail</b>	<b>30</b>	<b>7</b>	<ul style="list-style-type: none"> <li>· Documentation of incoming goods inspection and temperature control</li> <li>· Proof of (hygiene-) training</li> </ul>



## Feed monitoring

22,517 samples from 37 different countries were analysed for toxins in 2012 within the scope of QS feed monitoring. The majority of the samples (88 percent) came from Germany. 2,411 samples were drawn in other European countries. Outside Europe, the most samples were from Brazil and Russia.

Number of feed samples by country of origin 2012



Country of origin	Number of samples
<b>Europe</b>	<b>22,309</b>
<b>Asia/Pacific</b>	<b>123</b>
among others	
Russia	44
Malaysia	29
Indonesia	15
Vietnam	10
Pakistan	10
India	7
Afghanistan	4
<b>North/South America</b>	<b>74</b>
among others	
Brazil	54
Argentina	8
USA	5
Canada	3
Peru	2
<b>Other countries</b>	<b>11</b>
<b>Total</b>	<b>22,517</b>

More than 385,000 analysis results were entered into the feed monitoring database in 2012. The vast majority of analyses (85 percent) involved plant protection product residues, followed by heavy metals with 21,076 analysis results. Compared to the previous year, an increase in analysis numbers can be observed above all with non-dioxin-like PCB.

Quality Assurance. From farm to shop.

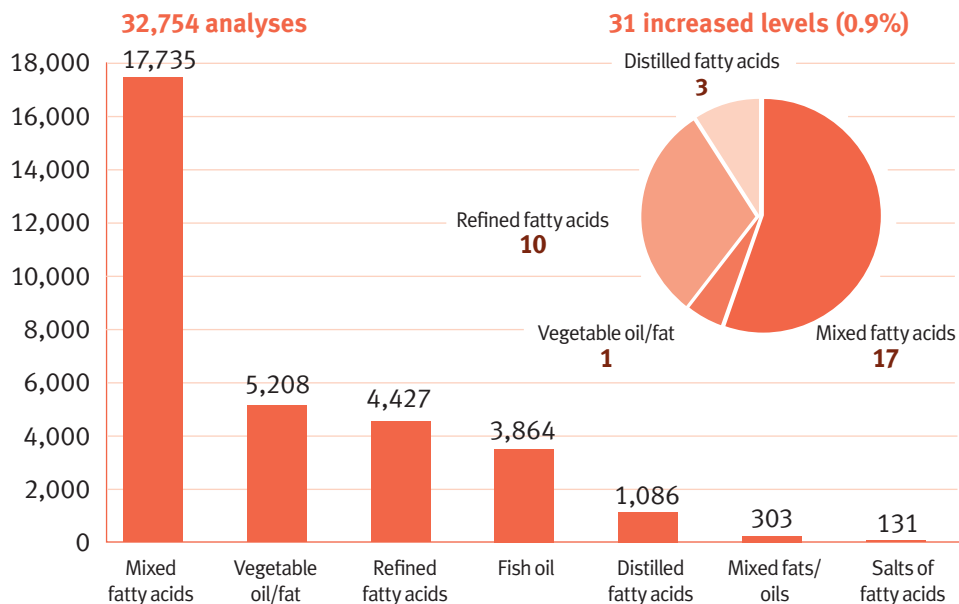
Number of analysis results by examined parameters

	2012	2011	Change
<b>Number of analysis results</b>	<b>385,086</b>	<b>306,823</b>	<b>+ 78,263</b>
Plant protection product residues	326,105	256,531	+ 69,574
Heavy metals	21,076	18,499	+ 2,577
Salmonella	9,665	8,868	+ 797
Deoxynivalenol, vomitoxin (DON)	5,406	4,963	+ 443
Zearalenone (ZEA)	5,156	4,652	+ 504
Dioxins	2,843	2,502	+ 341
Aflatoxin B1	2,495	2,444	+ 51
Animal components	2,493	2,399	+ 94
Non-dioxin-like PCB	2,960 <sup>1</sup>	464	+ 2,496
Total dioxins and dioxin-like PCB	1,842	1,357	+ 485
PCB (dioxin-like PCB)	2,681	2,158	+ 523
Antibiotically effective substances	853	784	+ 69
Others	1,511	1,202	+ 309

<sup>1</sup> Maximum levels and obligatory examination were only included in the QS requirements since 2012.

Positive release sampling has had to be conducted for certain feed materials since July 2011. The scheme participants conducted 32,754 of these analyses in 2012. Increased concentrations were detected in 31 instances. The legal action value was exceeded in 3 samples and the QS guidance value in 28 samples. The maximum level was not exceeded in any instance.

Number of positive release samples and increased levels by feed materials in 2012



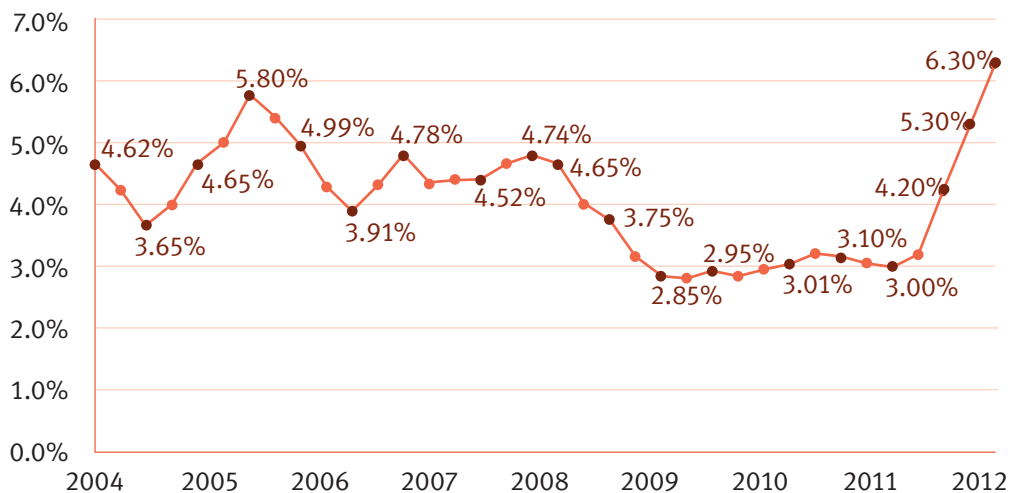
**Purchase prices for compound feed**



**Salmonella monitoring**

A comprehensive programme for the monitoring of salmonella contamination in pig production businesses was set up in the QS scheme on 1 April 2003. Today, almost 25,000 businesses participate in salmonella monitoring. A total of 1.7 million samples were examined for salmonella antibodies in 2012. After the number of Category III businesses with a high risk of salmonella import had continuously decreased since 2003, a sharp increase in the number of “risk businesses” has been recorded in recent months. The QS committees are currently discussing the causes and possible countermeasures.

**Development of the share of category-III businesses in salmonella monitoring**



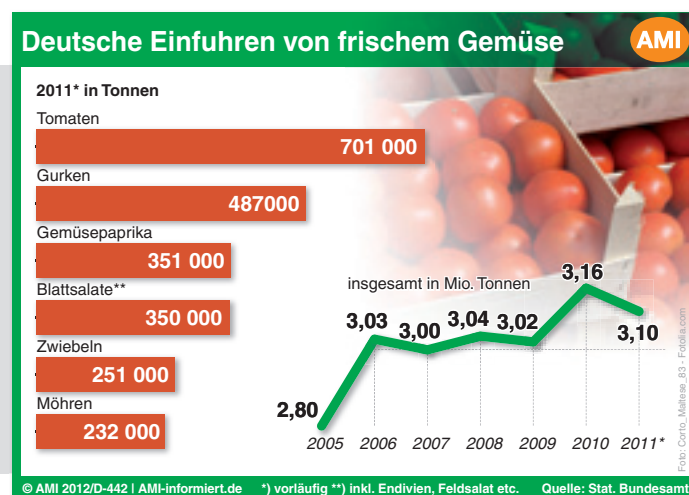
# Facts and Figures Supply Chain Fruit, Vegetables, Potatoes

## Participant Numbers

Number of scheme participants in the Supply Chain Fruit, Vegetables, Potatoes in March 2013

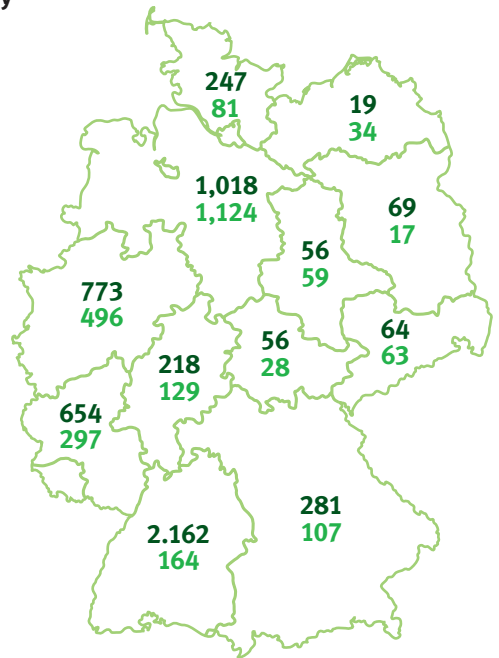
Stage	Total		Germany		Other countries	
	Number	Change over previous year	Number	Change over previous year	Number	Change over previous year
<b>Total</b>	<b>24,680</b>	<b>+ 1,049</b>	<b>19,302</b>	<b>+ 196</b>	<b>5,378</b>	<b>+ 853</b>
<b>Production</b>	<b>13,164</b>	<b>+ 919</b>	<b>8,216</b>	<b>+ 150</b>	<b>4,948</b>	<b>+ 769</b>
· Fruit and vegetables	10,536	+ 819	5,617	+ 67	4,919	+ 752
· Potatoes	2,628	+ 100	2,599	+ 83	29	+ 17
<b>Wholesale</b>	<b>732</b>	<b>+ 130</b>	<b>502</b>	<b>+ 46</b>	<b>230</b>	<b>+ 84</b>
<b>Food Retail</b>	<b>10,784</b>	<b>-</b>	<b>10,584</b>	<b>-</b>	<b>200</b>	<b>-</b>

## German imports of fresh vegetables



### Number of producers with eligibility of delivery in the QS scheme in March 2013

Total	13,164 <sup>1</sup>	
	Production fruit, vegetables	Production potatoes
Germany	5,617	2,599
Other countries	4,919	29
Belgium	2,644	
Netherlands	734	
Austria	613	
Spain	606	18
Italy	173	1
Greece	78	
France	38	2
Portugal	10	6
Morocco	7	
New Zealand	5	
Israel	1	2



<sup>1</sup> of which

Producers with certification QS-GAP: 6,542

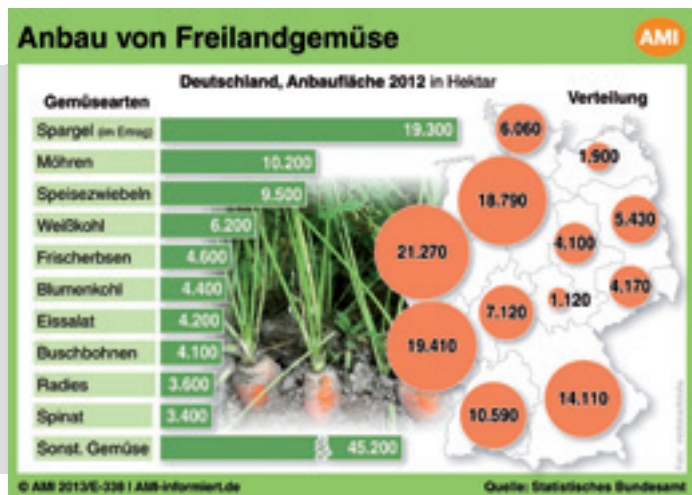
Producers with recognised certification Global G.A.P.: 3,115

Producers with recognised certification IKKB: 2,268

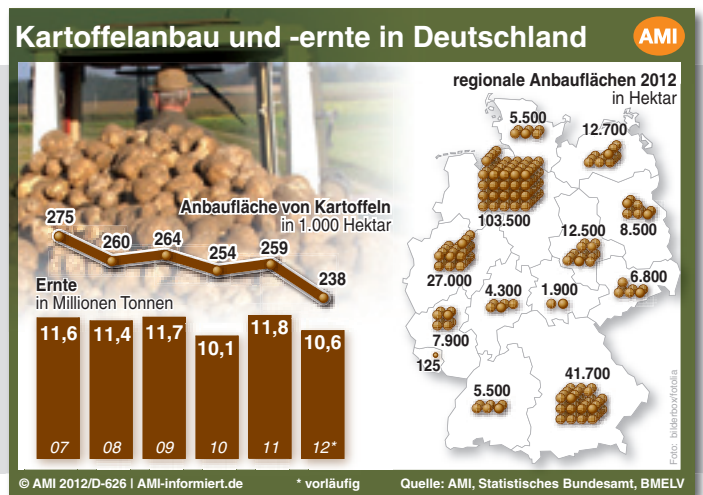
Producers with recognised certification AMAG.A.P.: 124

■ Scheme participants Production Fruit, Vegetables  
■ Scheme participants Production Potatoes

### Cultivation of outdoor vegetables



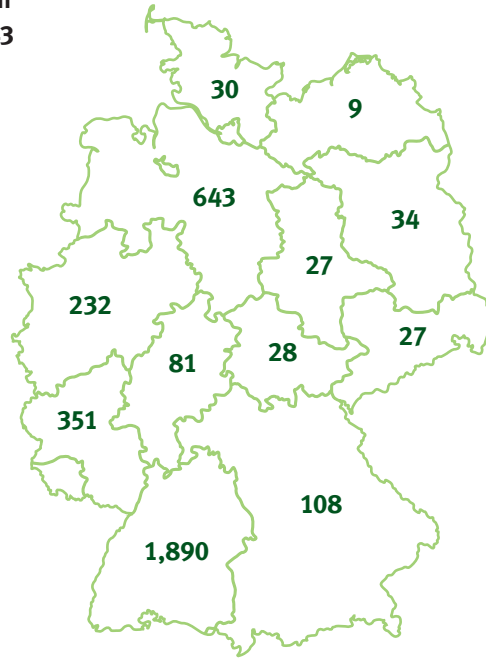
### Potato cultivation and harvest in Germany



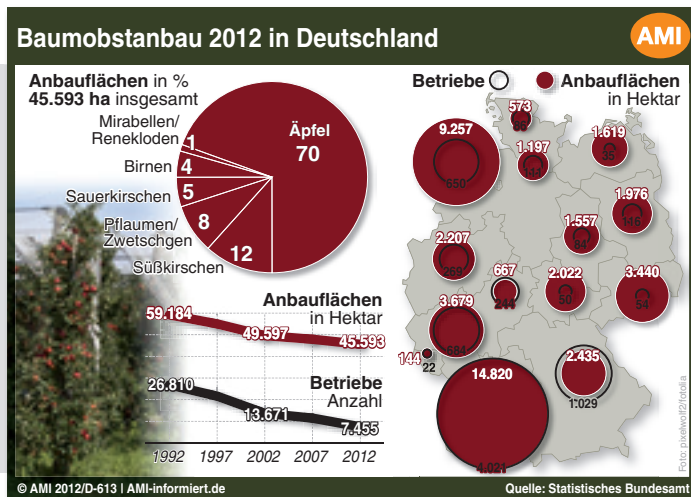


**Number of scheme participants in top fruit production in March 2013**

<b>Total</b>	<b>5,037</b>
<b>Germany</b>	<b>3,460</b>
<b>Other countries</b>	<b>1,577</b>
Austria	613
Belgium	527
Spain	297
Italy	78
Netherlands	47
New Zealand	5
France	4
Morocco	2
Poland	1
Somalia	1
Czech Republic	1
Hungary	1

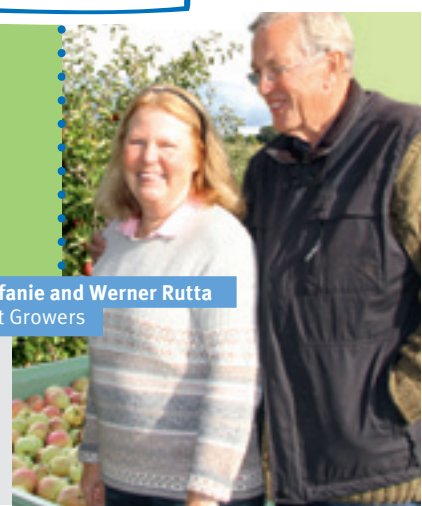


**Top fruit production in Germany 2012**



“ We run the most northerly apple orchard in Schleswig-Holstein which was mentioned for the first time in the 18th century. It used to house an apple science institute in which specialists were trained and research was conducted. We go our own way nowadays: bigger spaces between the rows and more room for the trees produce more light and high yields. ”

**Stefanie and Werner Rutta**  
Fruit Growers



## Audit results

A total of 12,175 audits were conducted in 2012 in the Supply Chain Fruit, Vegetables, Potatoes, which is almost 700 more than in the previous year. More than 70 percent of the scheme participants did very well and were awarded the Status I. With 3.3%, the proportion of audits in which a K.O. evaluation was awarded was 1.1 percentage points lower than 2011.

### Number of regular audits and K.O. evaluations in the Supply Chain Fruit, Vegetables, Potatoes 2012 and 2011

Stage	2012		2011	
	Number	of which K.O. / no approval	Number	of which K.O. / no approval
<b>Total</b>	<b>12,175</b>	<b>406 (3.3%)</b>	<b>11,484</b>	<b>505 (4.4%)</b>
<b>Production (QS)</b>	<b>609</b>	<b>7 (1.1%)</b>	<b>482</b>	<b>8 (1.7%)</b>
<b>Production (QS-GAP)</b>	<b>6,497</b>	<b>124 (1.9%)</b>	<b>6,014</b>	<b>65 (1.1%)</b>
<b>Wholesale</b>	<b>474</b>	<b>15 (3.2%)</b>	<b>309</b>	<b>5 (1.6%)</b>
<b>Food retail</b>	<b>4,595</b>	<b>260 (5.7%)</b>	<b>4,679</b>	<b>427 (9.1%)</b>

### Number of regular audits and frequent C/D/K.O. evaluations in the Supply Chain Fruit, Vegetables, Potatoes 2012

Stage	No. of Regular Audits	Requirement	No. of evaluations		
			C	D	K.O.
<b>Production (QS)</b>	<b>609</b>	<ul style="list-style-type: none"> <li>Annual nutrients balance</li> <li>Hygiene checklist</li> <li>Recording of plant protection measures</li> </ul>	36 31 38	21 16	1
<b>Production (QS-GAP)</b>	<b>6,497</b>	<ul style="list-style-type: none"> <li>Employee with first aid training</li> <li>Inventory list/ hazardous substance directory of all plant protection products</li> <li>First aid box</li> </ul>	17 8 6	241 249 125	
<b>Wholesale</b>	<b>474</b>	<ul style="list-style-type: none"> <li>Participation in residue monitoring</li> <li>Information/training on the QS scheme</li> <li>Pest monitoring</li> </ul>	49 33 31	16 1	3
<b>Food retail</b>	<b>4,595</b>	<ul style="list-style-type: none"> <li>Legal labelling in the sales area</li> <li>Information/training on the QS scheme</li> <li>Incoming goods inspection</li> </ul>	212 216 201	79 218	77

## Sanction procedures

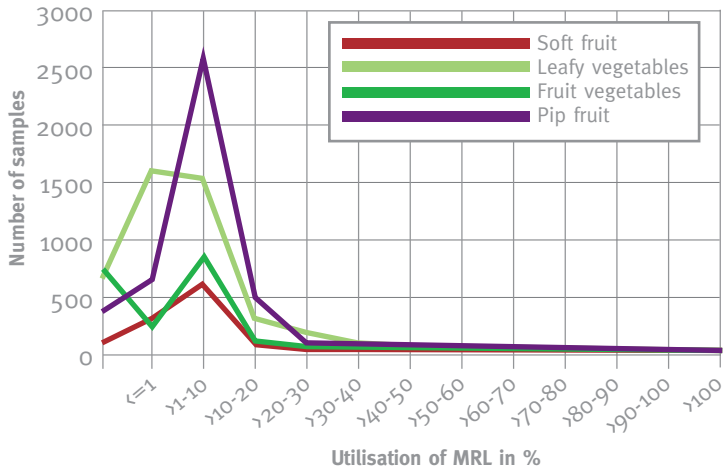
A total of 124 sanction procedures were negotiated in the Supply Chain Fruit, Vegetables, Potatoes in 2012. The sanction board issued a warning in 16 cases. A contractual penalty was imposed 103 times. In three cases, the scheme participants were given further punishment (e.g. suspension, increased audit frequency) in addition to the contractual penalty. Two sanction proceedings were dismissed.

### Sanction procedures in the Supply Chain Fruit, Vegetables, Potatoes 2012 und 2011

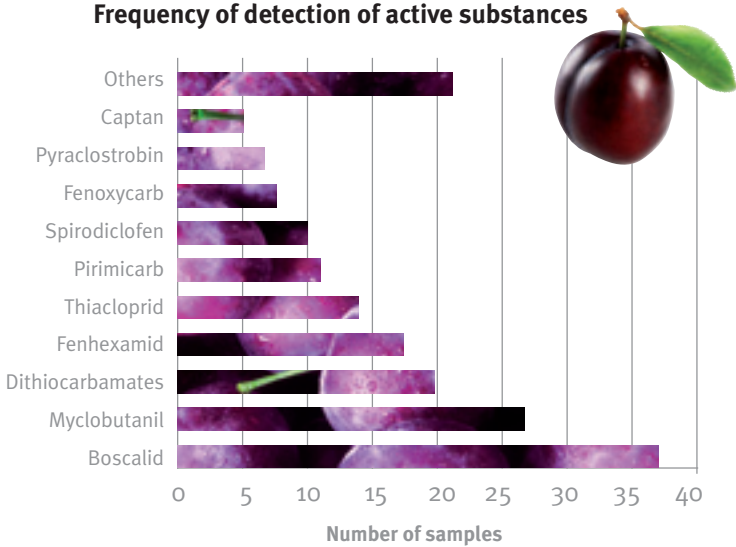
	2011	2012	
<b>Sanction Cases</b>	<b>80</b>	<b>124</b>	<b>Extract of K.O. evaluations</b>
<b>Production<sup>1</sup></b>	<b>78</b>	<b>115</b>	<ul style="list-style-type: none"> <li>· Compliance with maximum residue levels</li> <li>· Use of authorised active substances/plant protection products</li> <li>· Compliance with the maximum permitted number of plant protection product applications</li> <li>· Compliance with the waiting time</li> <li>· Documentation of fertilisation/plant protection measures</li> <li>· Documentation of/compliance with hygiene methods, hygiene checklists or risk analyses</li> <li>· Umsetzung des Rückstandsmonitorings</li> <li>· Sicherstellung der Rückverfolgbarkeit</li> </ul>
· Fruit, vegetables	69	98	
· Potatoes	16	31	
<b>Wholesale</b>	<b>2</b>	<b>8</b>	<ul style="list-style-type: none"> <li>· Implementation of residue monitoring</li> <li>· Assurance of traceability</li> </ul>
<b>Food retail</b>	<b>-</b>	<b>1</b>	<ul style="list-style-type: none"> <li>· Legal labelling of fruit and vegetables</li> <li>· Separation of goods</li> </ul>

<sup>1</sup> Producers of fruit/vegetables and potatoes were affected in 7 out of 78 (2011) and 14 out of 115 (2012) sanction cases with producer businesses. They were counted for every production branch for this reason.

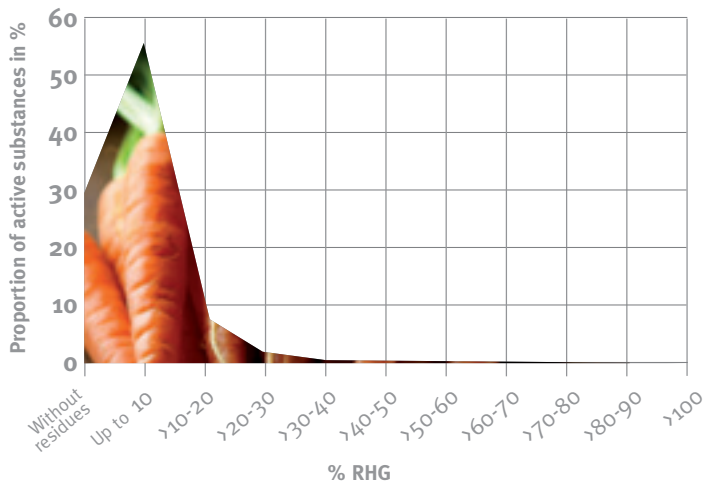
**Percentage of Maximum Residue Levels (MRL) exploitation for selected product groups in residue monitoring 2012**



**Frequency of detection of active substances**



**Percentage of MRL exploitation of active substances**



**Residue monitoring**

A total of 11,158 analyses were conducted in QS Residue Monitoring in 2012, 30.7 percent on the producer level and 69.3 percent in wholesale businesses. No active substances of any kind were found in 46 percent of the examined samples. Of the samples that contained active substances, more than one substance was detected in 68 percent of them.

Together with the German Fruit Traders' Association (DFHV), QS publishes the results of residue monitoring for fruit and vegetables once a year. 16,059 samples from 66 countries were evaluated for the **monitoringreport 2013**. 40 percent contained no detectable residues whatsoever. The proportion of samples in which the maximum residue level was exceeded lay at 0.9 percent for goods of European origin and 2.8 percent for goods from third countries.

The **monitoringreport 2013** contains among other things detailed evaluations of the residue situation with plums and carrots. No residues of any kind were detected in 57 percent of the 263 plum samples examined. A quarter of the samples with residues contained only one active substance.\* A total of 21 different active substances were analysed.

The 441 carrot samples examined originated from six European countries and Israel. Almost half of the samples were free of residues. Overall, 25 different active substances were detected. For 65 percent of the detected active substances, the percentage of the maximum residue level present was under 20 percent per substance. On average, 9.7 percent of the maximum residue level was present.

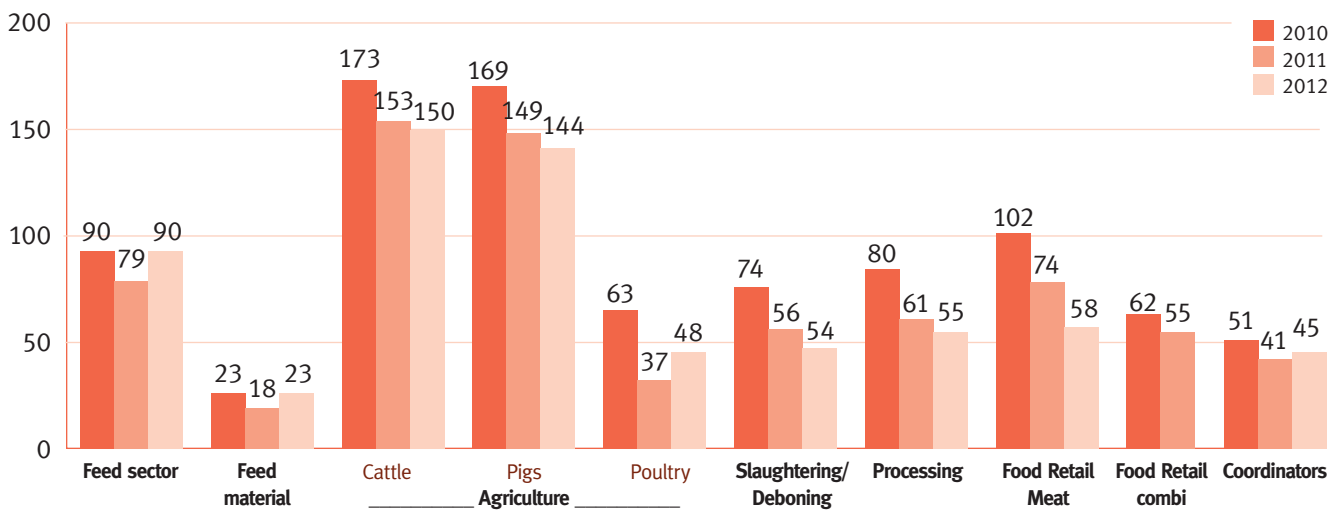
\* The measured value was evaluated without inclusion of the analytical measurement uncertainty of +/-50 percent.



### Certification bodies and laboratories

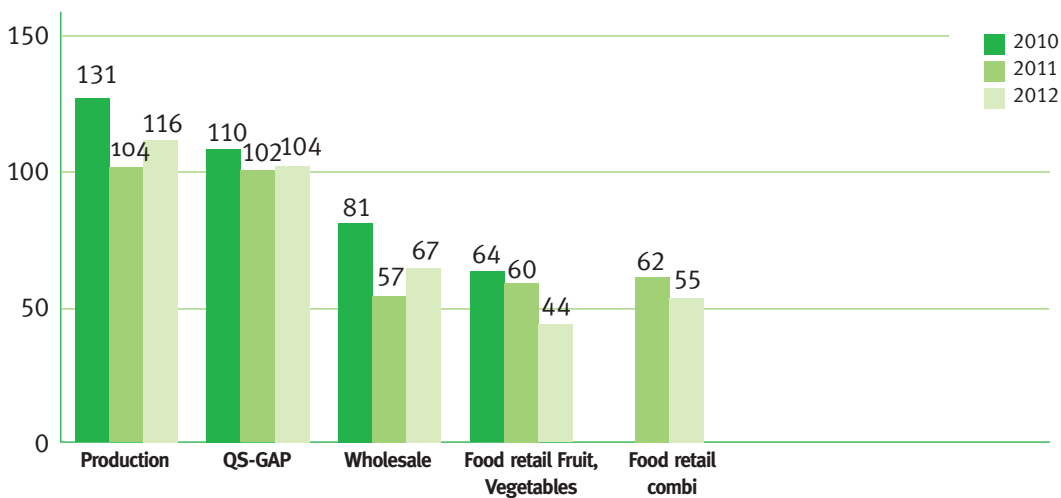
38 certification bodies were approved in the QS scheme in 2012. 436 auditors were registered to conduct audits in the QS scheme, of whom 374 had approval for one or more stages of the Supply Chain Meat and Meat Products and 223 for the stages of the Supply Chain Fruit, Vegetables, Potatoes.

Number of auditor approvals<sup>1</sup> per stage 2012 (Supply Chain Meat and Meat Products)



<sup>1</sup> Double nominations possible

Number of auditor approvals<sup>1</sup> per stage 2012 (Supply Chain Fruit, Vegetables, Potatoes)

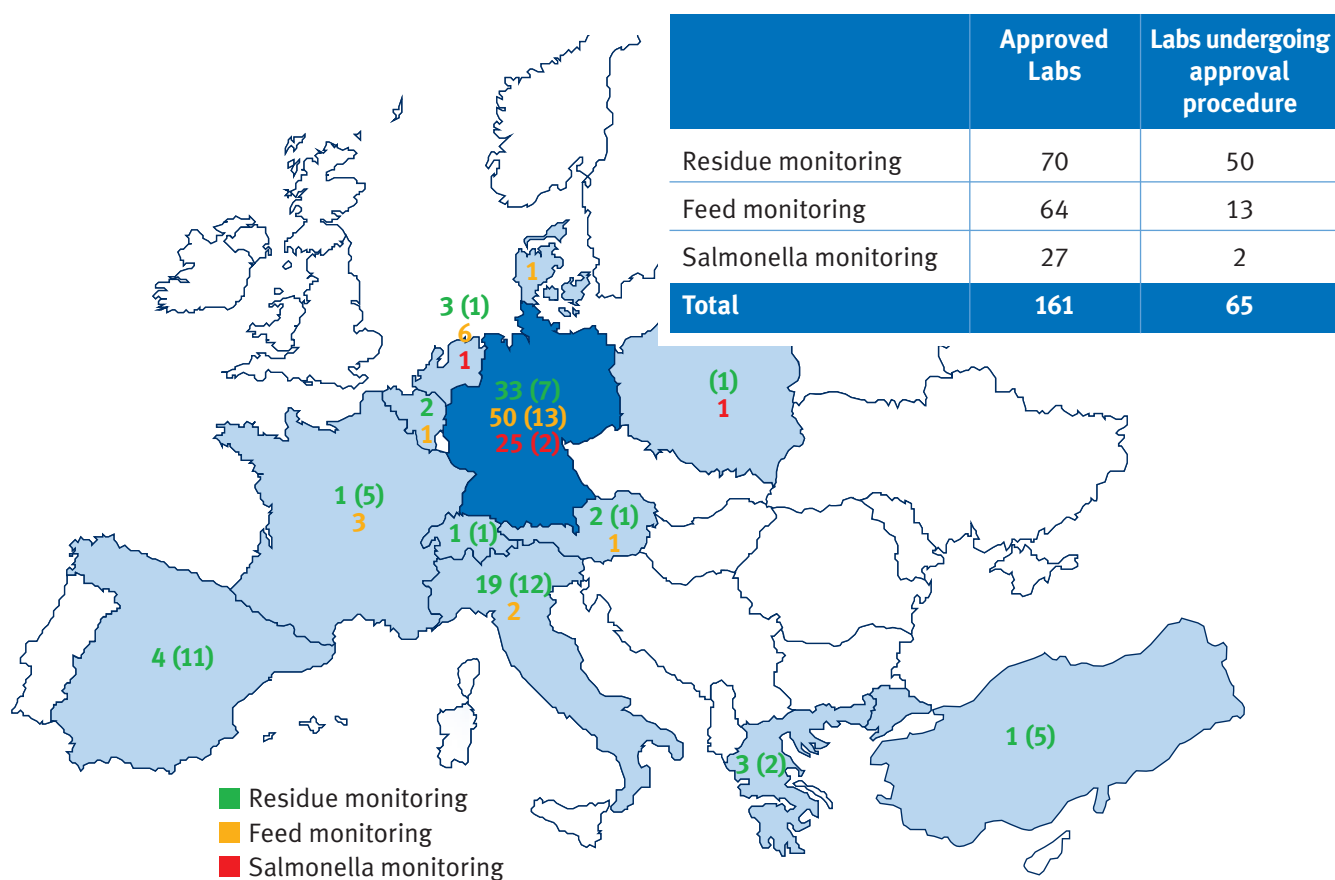


<sup>1</sup> Double nominations possible

A total of 161 laboratories from 13 countries were approved in the QS scheme in March 2013 to conduct analyses in the monitoring programmes. 65 additional laboratories are currently undergoing the approval procedure.

Outside Europe, laboratories in Egypt, Sri Lanka, China and Brazil either have QS approval or are in the process of obtaining it.

**Number of laboratories approved in the QS scheme in March 2013 (Labs currently undergoing recognition)**



### Implementation of the monitoring programmes 2012 and changes over the previous year

Monitoring Programme	Number of samples	Objections/Values exceeded/Positive results	Number of participating businesses
Residue monitoring	<b>11,158<sup>1</sup></b> (+ 25%)	<b>207<sup>1</sup></b> (+ 95%)	<b>ca. 14,000<sup>1</sup></b> (+ 8%)
Feed monitoring	<b>22,517</b> (+ 2.8%)	<b>30</b> (0%)	<b>ca. 5,240</b> (- 3.4%)
Salmonella monitoring	<b>1,72 Mio.</b> (- 2.7%)	<b>231,425</b> (+ 3%)	<b>ca. 25,000</b> (- 2.9%)

<sup>1</sup> Including the data of the Belgian standard owner Vegaplan



Quality Assurance. From farm to shop.

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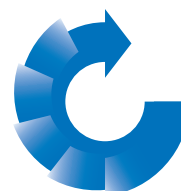
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