Organic integrity & fraud:

The perspective of trade & processing anno 2019

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Part 1

A brief history

A brief history

1992-2000

- *Paradise stadium; little attention for fraud and residues*
- *Small market; players knew each other very well*

2000-2005

- *Growing organic market*
- *First cases & starting debate about residues in organic*
- *BNN sets an orientation level for residues in organic*

2005-2010

- *Fast development of analysis methods by labs & their economic interest in organic (analysis)*
- *First big fraud and contamination cases in organic*

A brief history

- *Rising awareness and first AFI meetings*
- *Start of big monitoring initiatives from public and private side*
- *BioNederland/Biokap sets an action-level based on BNN*
- *Start of disharmonization between EU-countries*

2010-2015

- *Full focus on residues and residue analysis in organic*
- *IFOAM EU sets an action level based on BNN and Biokap*
- *New import regime implemented in 2012; a big mistake!*
- *Retail sets private zero tolerance levels*
- *The 10 ppb becomes more or less standardized on private level*
- *Ring tests show the enormous differences between labs*
- *Labs becomes the real winners of organic growth…*
- *Commission demands residue analysis by 5% of operators CB's*

A brief history

2015-2019

- *Discussion new regulation; decertification level for residues not taken up, but evaluation in 2024 will follow*
- *Glyphosate contamination in some areas in Germany above 10 ppb for all crops*
- *Disharmonisation between EU countries in handling of (the same) contamination cases grows and grows*
- *The failure of the new import regime leads to extra burdens on imports from countries east of EU and since 1-1-2019 also of China*
- *Estimation of extra costs for only residue analysis on EU-scale for operators is in direction of 50 million Euro's p/y.*
- *Hardly any attention of other irregularities in regard to organic requirements…*
- *The process oriented regulation and control is in real danger*

Part 2

Some cases from the past

Some big fraud cases from the past

2005-2006: Turkish raisins

- *Contaminated with carbendazim*
- *Decertified in Netherlands till end products*
- *Not decertified till end product in other countries*
- *4-5 years law suit; some million euros of damage*

2010-2011: Turkish lentils

- *Contaminated with glyphosate after development of new analysis method below 500 ppb*
- *Decertified in many countries till end products*
- *Company not decertified because of no economic profit of co-mingling of conventional and organic*
- *Some million euros of damage*

Some big fraud cases from the past

2012-2014: feed grains Rumania-Italy

- *Paper fraud & double certification*
- *Detected after years of fraud*

2016-2017: feed grains Ukraine

- *Attempt of a certifier to control the whole organic market in Ukraine*
- *Many quality topics and fraud actions*
- *EU took measures*

Some other cases

2008-2009: potatoes in NL

- *Contamination with anti-sprout residues from 5 to 50 ppb*
- *Research through the whole chain*
- *Cause: packaging lines*
- *Solution: separated organic packaging lines required*

2018: coffee from Africa

- *High amounts of residues: 50-100 times above 10 ppb*
- *Second and third analysis: between 5-10 ppb*
- *Cause: mistake of the first (highly renomated) lab: reported 100 times higher…*

Some other cases

2018: Herbs from Italy

- *Herbs blocked by Italian certifier*
- *Italian certifier did research and gave the herbs free*
- *Dutch certifier kept the herbs blocked*

2018: Import feed components from Moldavia

- *Certified by CB "A" and attempt to import to Italy*
- *Decertified by Italian CB because of residues*
- *Certified by CB "B" again and exported to the Netherlands 8 months later.*
- *Decertified in NL in December*

Part 3

Challenges for companies

Challenges

Unclear regulation for infringement "residues"

- One of the weaknesses of the current Regulation is the lack of clarity - and thus harmonisation - on how non-compliances and suspicions have to be dealt with.
  For example, Article 30 of Reg (EC) No 834/2007 and Article 91 of Reg (EC) No 889/2008 are not consistent and create confusion.
- The current Regulation does not give clear guidance how to deal with residues of **non-allowed substances** in organic products.
  Different systems are applied in different Member States and even in different Control Bodies.
  This is a well-known problem for both CB's and the operators within the EU and for international trade.

Challenges

Unharmonized situation within EU

- Different approaches in the handling of residue findings in the different Member States:
  - Case-by-case process oriented
  - 0.01 mg/kg (or other) automatic decertification threshold
  - 0.01 mg/kg (or other) action level
  - Zero tolerance
  - ……
- National authorities has no decertification power for whole EU, only on national level (for specific lots)

Example herbs: Italian certifier did research and gave the herbs free (process-oriented) and Dutch certifier did not accept for Dutch operator/market (process-oriented but not satisfied with answer Italian CB)

Challenges

Unharmonized situation within EU

- Investigation level ? Decertification level?
- No harmonized sanctions in EU
  - e.g. when to stop or withdraw a product from the shelves?
- Thresholds set up and implemented by retailers in private contracts
- Case-by-case approach sometimes is not working because it is technically or economically not feasible.

- We do face today the opposite of a level playing field!

Challenges

Unharmonised situation with imports third countries

- EU Authorities/CB's ask CB's in third countries for explanation in case of residue contaminations.
- Accredited CB's (in third countries) explanations are often not satisfying, but they have decisionmaking power.
- National authorities/CB's in EU have no decertification power on EU level, only on national level (for specific lot). Decertified import in Italy was offered and accepted in the Netherlands and only 7 months later decertified again.

Failing import regime based on accredited CB's with growing unharmonized reaction on national level

- *As reaction on the failing import-regime Commission imposed extra requirements for imports from several countries from Eastern Europe and China*
- *Costs imports China for one Dutch importer rises with 250k euro p/y*

Challenges

Lab analysis as instrument to blackmail companies

- Invalid/obscure lab analysis are used in different ways to put pressure on price, not accept the goods etc.

Different-incomparable lab results (in rings-tests)

- It is generally known that 70% of the EU labs fail over 20 years in the annual public ring-test for labs.
- Unexpected private ring-tests by Lach & Bruns show that also under the high-qualified labs there is a wide range of differences on the same samples.
- Companies have to deal day-by-day in the analysis jungle; the big companies have invested in huge capacities for quality management, lab facilities and analysis costs

Challenges

No insurance possibilities for devaluation goods in case of residue contamination (because of lack of juridical gap)

- Invalid/obscure lab analysis are used in different ways to put pressure on price, not accept the goods etc.

And many more challenges, like…

- Delivery contracts for retail and multinationals and penalties in case of non-delivery
- …

Part 4

Survival of the fittest

Some strategies

Analyze & analyze

- The number of analysis is rising and rising.
- For imports secured pre-shipment samples are more or less standard, followed by a second analysis at arrival in EU.
- Companies want to be sure, but there is no 100% securance against residues, because:
  - There are 1.000 possible substances
  - Most multi analysis cover groups of residues, totally f.e. 100 substances
  - Differences in lab results
  - Differences in multi and single substance analysis
  - Differences in interpretation by CB's
  - Discussions around concentration factors
  - Appearance of substances later on in the chain (after processing)
  - …

Some strategies

Investment in quality research and risk analysis

- Staff number of quality management has accumulated
- Programs like BioTrust to specify risks

Choice to set-up own projects and long-lasting relationships with farmers/projects/suppliers

- Support farmers with quality tools and knowledge
- Audits by the companies themselves
- Risk assessment of companies
- Involve experts from Fibl

Ignorance

- No analysis taken
- If you find residues you are the problem-owner
- There is no obligation to do analysis

Some strategies

Analyze and not sharing positive results with CB

- Possibility to mingle up just under the 10 ppb level
- If you share your products are blocked and economical damage starts

And many more, probably

Some conclusions so far

1. ***Residue analysis as panacea for organic integrity is killing for organic in the long term.***
2. ***Over focus on residues reduces attention for other types of quality issues in organic quality and drive organic in direction of 'clean product'***
3. ***Residue analysis influence the market a lot; for small farmers and companies the economic risks become to big.***
4. ***Lack of harmonization in the area of residue interpretation transfers organic into Russian roulette.***

Part 5

Future orientation

The original principle in law

The Law

EU directive 834/2007- Article 4 Overall principles

Organic production shall be based on the following principles:

(a) the appropriate design and management of biological processes based on ecological systems using natural resources which are internal to the system by methods that:

(iv) are based on risk assessment, and the use of precautionary and preventive measures, when appropriate.

The principle of risk based approach should become leading by…

Organic operators have a risk based management system (organic HACCP) in practice

- specified for type of operator (and type of risks)
- specified for seize of operator and place in the chain
- (data) system that can be easily controlled

National authorities/CB's in EU countries

- inspection program fully based on risk based principle
- transfer from inspection to audit of the risk based management systems of operators (to start with trade & processing companies)
- EU audits on the quality of certification and control
- Participate in EU system for exchange information

The principle of risk based approach should become leading by…

CB's in third countries

- Subdued to EU supervision / audit system to secure
  - Independence operators-CB
  - Corruption measures in regard to inspectors
  - Risk based inspection/audit system
  - Share data in case of fraud by operators to Comm for exclusion of operators to export to EU.

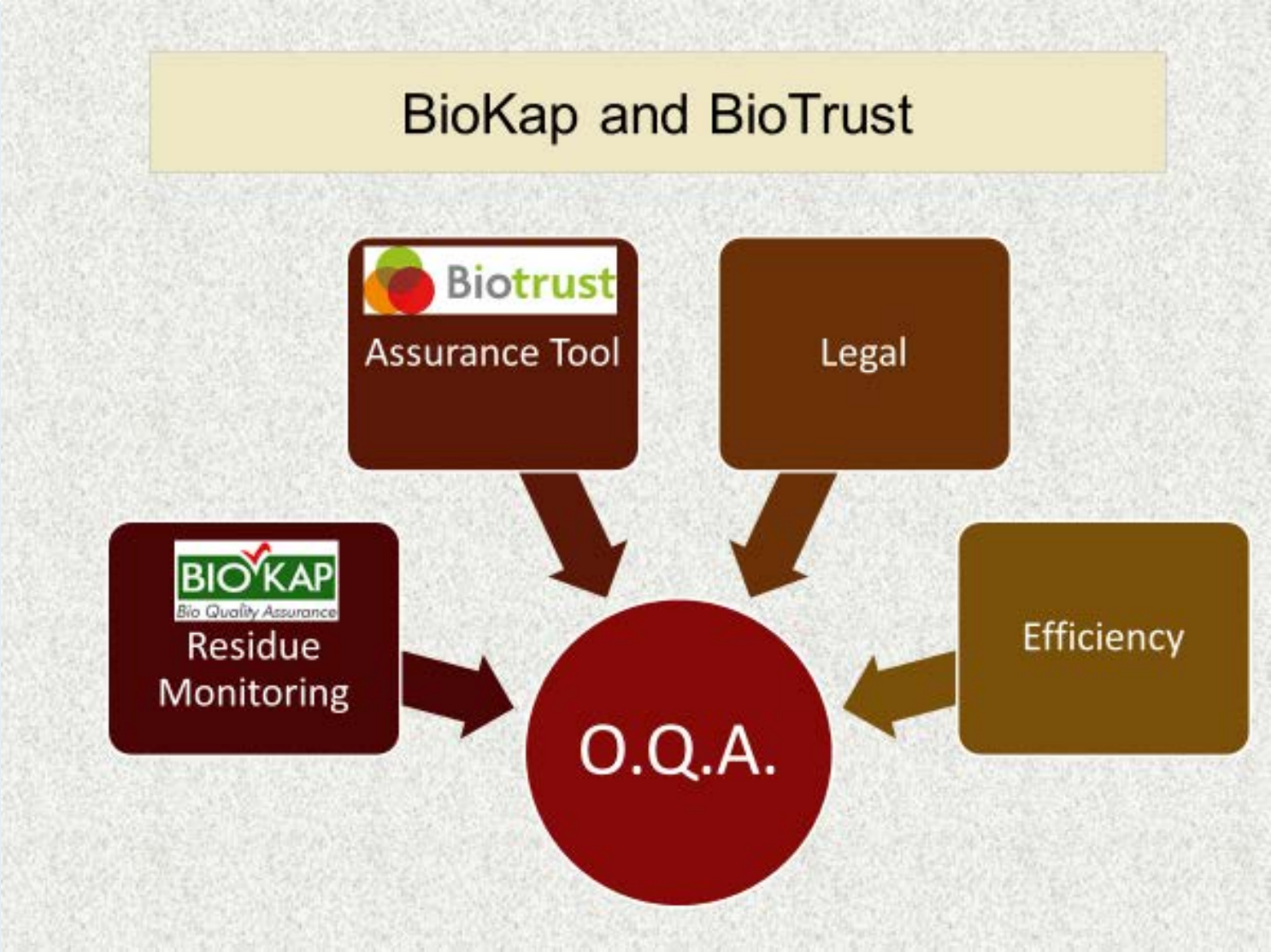
EU authority (Com)

- Re-install import evaluation on national level with international registration data base for exclusion fraudulent operators (in all EU countries)
- Audit-system for CB's in third countries
- Accreditation system for quality labs for analysis on different crops/substances
- Harmonized decision model for residue contamination
- Database decertified companies / lots for residue contamination

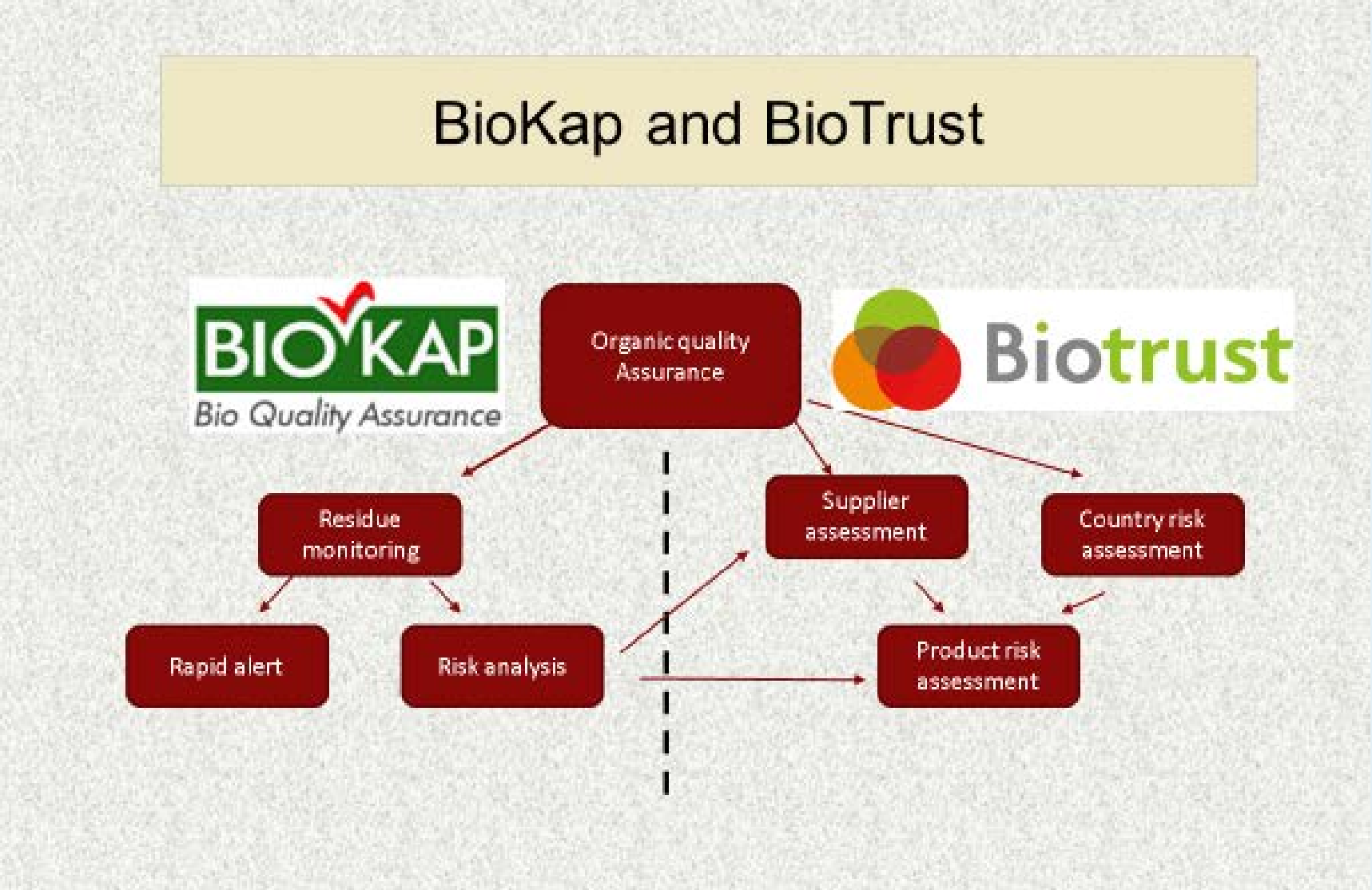
Part 6

Best practice from Holland

Best practice example risks & residues



Best practice example risks & residues



Best practice Biokap monitoring

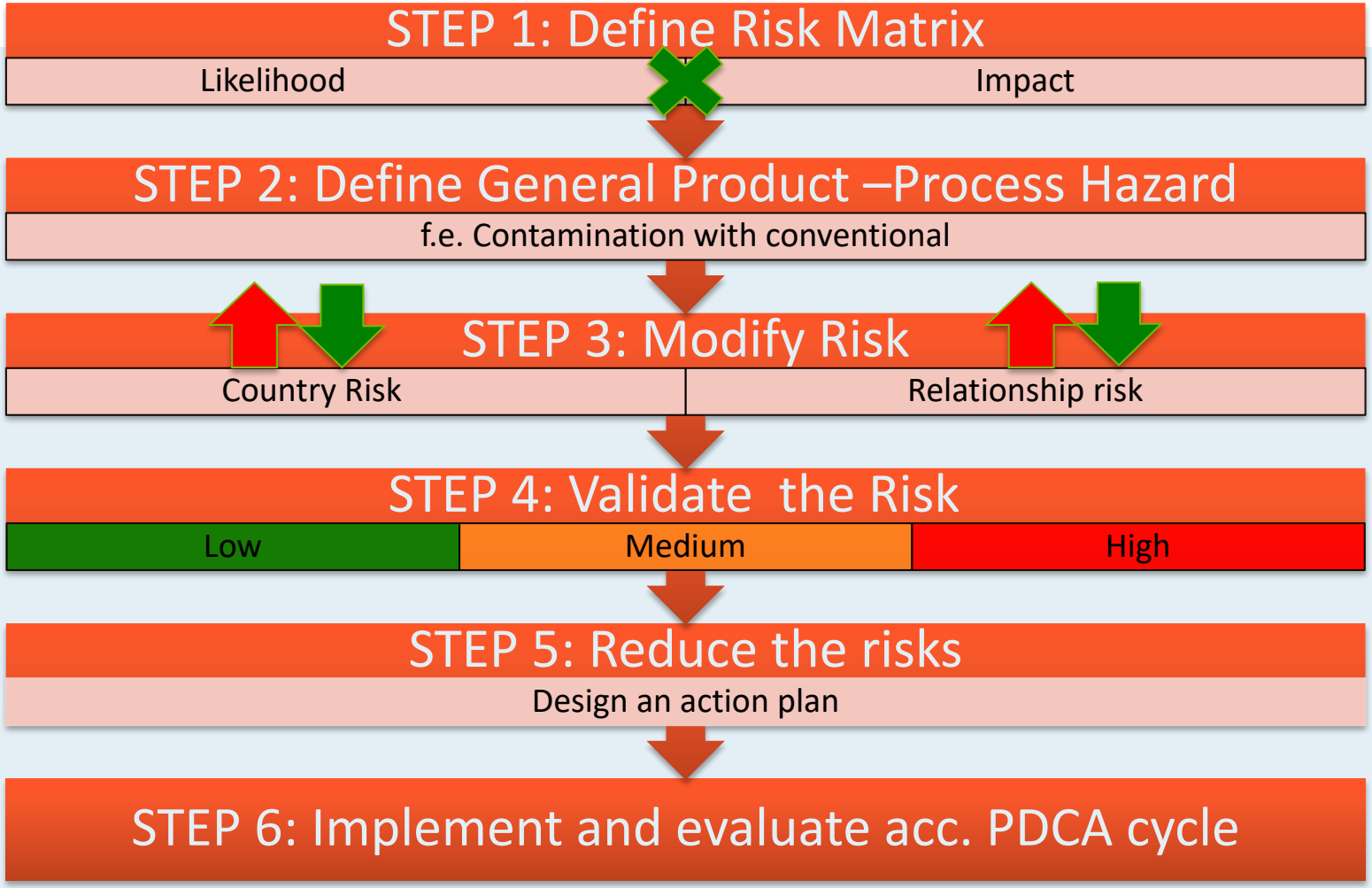
Ammount of postive analyses:

Year	Total samples	Positive	% positief	> Action limit	%> limiet
2009-2012	3277	638	19,5	182	5,6
2012	587	106	18,1	30	5,1

2009-2012: Country analyses

Country of origin	Total samples	Positive	% positief	> Action limit	%> limiet
KAMEROEN	14	6	42,86	6	42,86
BELGIUM	10	2	20	2	20
USA	12	2	16,67	2	16,67
SERBIA	55	13	23,64	8	14,55
JAPAN	7	4	57,14	1	14,29
INDIA	140	47	33,57	19	13,57
PAKISTAN	8	5	62,5	1	12,5
RUMENIA	9	1	11,11	1	11,11
BOLIVIA	49	17	34,69	5	10,2
TURKEY	339	107	31,56	34	10,03
ETHIOPIA	11	8	72,73	1	9,09
INDONESIA	25	4	16	2	8

Best Practice BioTrust process: 6 steps



o Step 1: define the risk matrix

Description	*Extra clarification*	Impact				
A non-conformity with long term consequences and violation of the organic principles. Or a systematic non-conformity with implication on multiple products	*Impact on more products or lots over a longer period, likely to cause media attention, e.g.: high residue levels, large scale mixture with regular, systematically violation of the legislation*	**3**	**Low**	**Medium**	**High**	**High**
A non-conformity with (in)direct implication on the product	*Impact on one product or lot, likely no media attention, e.g.: low residue levels around limits, GGO below 0,9*	**2**	**Low**	**Low**	**Medium**	**High**
A non-conformity with no (direct) implication on the product	*No impact on the product, e.g.: administration*	**1**	**Low**	**Low**	**Low**	**Medium**
		Likelihood	**1**	**2**	**3**	**4**
		Description	Very small	Small	Medium	High
		% of non-conformities	<1	<5	<10	>10

o Step 2: define the general hazards

Proces	Proces section	Proces section	Hazards	Impact
primairy sector	crop and feedcrop	cultivation	inconversion product sold as organic	3
primairy sector	crop and feedcrop	cultivation	use or misuse of not permitted basic materials (seeds)	3
primairy sector	crop and feedcrop	cultivation	use or misuse of not permitted fertilizers	2
primairy sector	crop and feedcrop	cultivation	incorrect application of crop rotation	2
primairy sector	crop and feedcrop	cultivation	use of not permitted ground covers	2
primairy sector	crop and feedcrop	cultivation	use of not permitted pesticides	2
primairy sector	crop and feedcrop	cultivation	use of not permitted crop enhancers	2
primairy sector	crop and feedcrop	cultivation	use of not permitted products for cleaning and sanitazion/decontamination of installations or buildings	2
primairy sector	crop and feedcrop	cultivation	not permitted crops cultivated on substratum	2
primairy sector	crop and feedcrop	cultivation	use of sanitazion/decontamination products during substratum cultivation	2
primairy sector	crop and feedcrop	cultivation	use of not permitted "dekaarde"	2
primairy sector	crop and feedcrop	cultivation	use of not permitted raw materials in substratum	2
primairy sector	crop and feedcrop	cultivation	presence of GGO in raw materials used in substratum	2
primairy sector	crop and feedcrop	cultivation	insufficient seperation between organic and regular plots	3
primairy sector	crop and feedcrop	cultivation	cultivation of the same crop as organic and regular on the same farm	3
primairy sector	crop and feedcrop	cultivation	exceding the duration of use regular livestock on a plot	2
primairy sector	crop and feedcrop	cultivation	exceding the nitrogen/hectare using livestock	2
primairy sector	crop and feedcrop	administration crop and feed	insufficient or no cultivationplan for past en present year	1
primairy sector	crop and feedcrop	administration crop and feed	insufficient or no fertilize administration	1

o Step 3: define the country risk

		Country Hazards		
	Weighing factor:	80%	20%	
Country	EU/Third country/Other	Corruption index 2012	No Organic legislation	Country Risk Factor
Afghanistan	Other	9,52	2	8,0
Albania	Other	2,31	1	2,0
Algeria	Other	2,24	2	2,2
Angola	Other	3,46	2	3,2
Argentina	Third	2,18	1	1,9
Armenia	Other	2,24	1	2,0
Australia	Third	0,90	1	0,9
Austria	EU	1,10	1	1,1
Azerbaijan	Other	2,82	1,5	2,6
Bahamas	Other	1,07	2	1,3
Bahrain	Other	1,49	1,5	1,5
Bangladesh	Other	2,93	2	2,7
Barbados	Other	1,00	2	1,2
Belarus	Other	2,46	2	2,4
Belgium	EU	1,02	1	1,0
Benin	Other	2,12	2	2,1
Bhutan	Other	1,21	1,5	1,3
Bolivia	Other	2,24	1	2,0
Bosnia and Herzegovina	Other	1,81	1,99	1,8
Botswana	Other	1,17	2	1,3
Brazil	Other	1,77	1	1,6
Brunei	Other	1,38	2	1,5
Bulgaria	EU	1,86	1	1,7
Burkina Faso	Other	2,00	2	2,0
Burundi	Other	4,01	2	3,6

1. Corruption index:
   80 % valued
   based on
   www. transparency.org

2. Organic legislation
   > EU : yes or no?
   20 % valued

Reported data from Biokap or residue experience

STEP 4: Relationship Risk 01.general

Supplier risk (defined as)	remark/definition	short (< 1 year)				long term (> 10 year)	risk level
duration of partnership	how longer the partnership how more information of the supplier you will have to asses risks	1,9	1,5	1	0,5	0,1	
duration of organic certificate	the longer the organic certification the more knowlegdge there will be to full fil the organic legislation and risks in the chain	1,9	1,5	1	0,5	0,1	
		conventionel		50/50		organic	
ratio organic/conventionel	how more conventional the supplier handles the likelihood of contamination with conventional will be higher	1,9	1,5	1	0,5	0,1	
		consumer product producer		trader		farmer	
position of the supplier in the chain	how further away in the chain of the primary producer, the likelihood that hazards could be an issue will be higher	1,9	1,5	1	0,5	0,1	
Supplier risk							**0,0**

STEP 4: Relationship Risk 02. trust

Trust (defined as)	remark/definition	no trust				complete trust	risk level
intentions of the management/integrity	what is the business agenda of the management, uphold the organic integrity or "only for the money"	1,9	1,5	1	0,5	0,1	
		low				high	
improvement capability	what is the learning capabilty of the organization, so that a mistake will not be happening again	1,9	1,5	1	0,5	0,1	
QA independency/decision procedure about issue's	how is the organization chart, is Quality independent. And who will decide about an issue, this in relation with the integrity	1,9	1,5	1	0,5	0,1	
capacity (knowlegde and agricultural issue's)	what is the knowledge level in the organization about quality management and agricultural issue's of the raw materials	1,9	1,5	1	0,5	0,1	
capability of the organic certifier	what is the audit and knowledge capabilty of the certifier and the trekrecord the last years	1,9	1,5	1	0,5	0,1	
		high				low	
non conformities	non conformities of the supplier, the more there are how likelier it. How ever if the number drops in several years the improvement capability could be high	1,9	1,5	1	0,5	0,1	
Trust risk							**0,0**

STEP 4: Relationship Risk 03. transparency

Transparancy (defined as)	remark/definition	no transparancy				complete transparant	risk level
last inspection reports (organic, quality)	have you received the last inspection reports of the organic and quality certification?	1,9	1,5	1	0,5	0,1	
mastercertificate (yield/area)	have you received the mastercerificate of the products/raw materials you'll purchase?	1,9	1,5	1	0,5	0,1	
ICS report (internal controle structure)	small group farming systems; have you received information about the ICS?	1,9	1,5	1	0,5	0,1	
Field report (crop/harvest); Cattle/Farming report	fertilizing plan, actions taken on the field or with the cattle or farm	1,9	1,5	1	0,5	0,1	
Transparancy risk							**0,0**

STEP 4: Relationship Risk 04 transparency

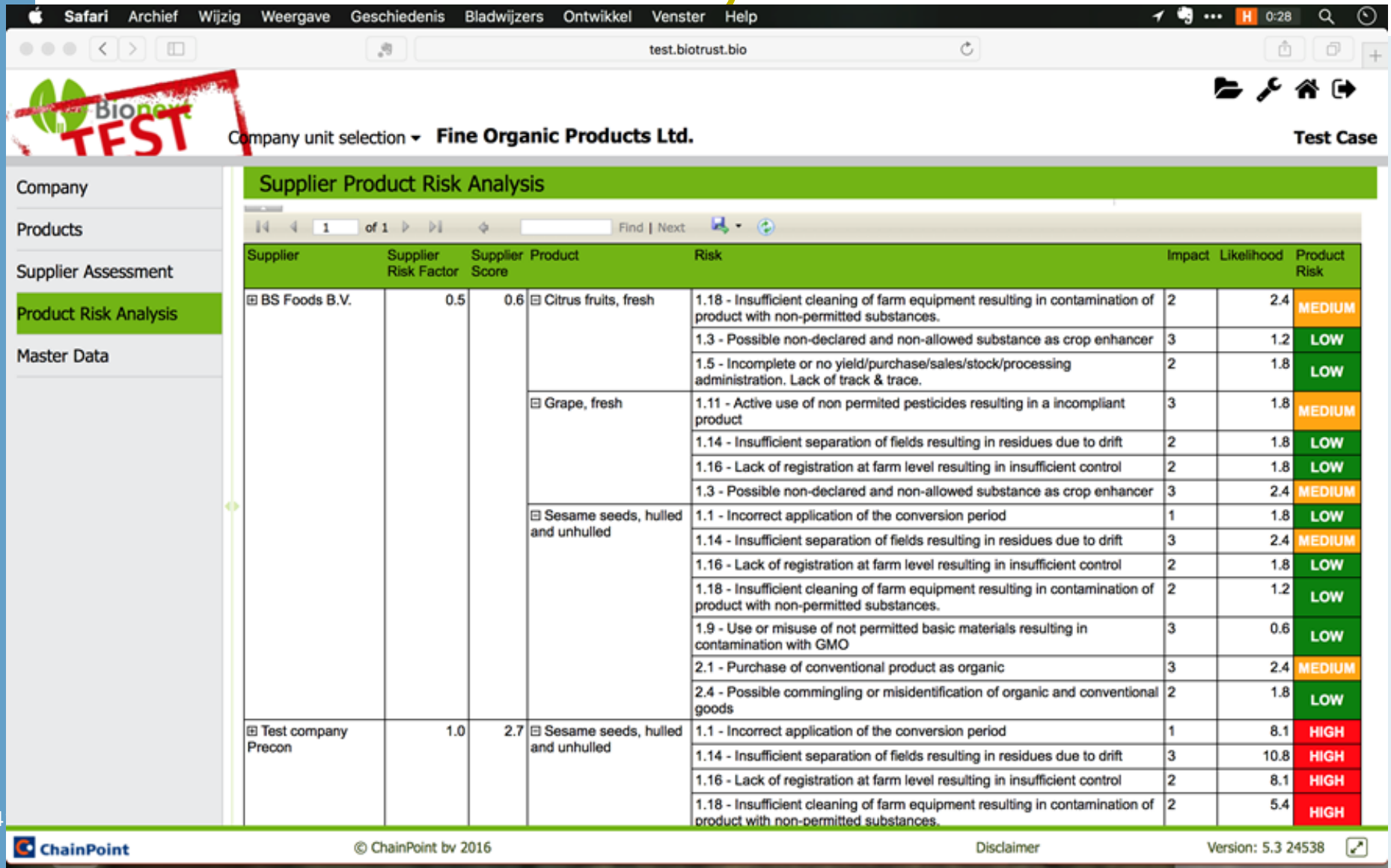
Transparancy jugdement (defined as)	remark/definition	issue's				no issue's	risk level
last inspection reports (organic, quality)	what do you learn from the inspection reports, are there issue's related to your raw materials or issue's related to the organization	1,9	1,5	1	0,5	0,1	
mastercertificate (yield/area)	what do you learn from the mastercertificate, are there issue's related to your raw materials (yield/area is to high) or issue's related to the organization	1,9	1,5	1	0,5	0,1	
ICS report (internal controle structure)	what do you learn from the ICS, are there issue's related to your raw materials or issue's related to the organization	1,9	1,5	1	0,5	0,1	
Field or Cattle/Farming report	what do you leran from the reports, are there issue'ss related to your raw materials or issue's related to the organization	1,9	1,5	1	0,5	0,1	
Transparancy jugdment risk							**0,0**

Relationship total risk factor	**0,0**

- STEP 5: Final Risk output

		Risk Analysis								
Raw material	**Hazard**	**Impact**	**Likelihood**	**Likelihood motivation**	**Country Risk Factor**	**Relationship Risk factor**	**(Country + 2*Relationship)/3**	**Likelihood with Country and Relationship**	**Total Raw material Risk**	**Which verification measurements are necessary?**
apricot	contamination conventional	3	2	difficult crop	1,2	1,4	1,3	2,7	MEDIUM	audit supplier
apricot	contamination conventional	3	2	difficult crop	0,5	1	0,8	1,7	LOW	

Product Risk Analysis



Part 7

The new regulation

Process for the New Organic Regulation

- Very controversial debate on “thresholds”
- It was not possible to achieve a common position
- At the EU Council working group on agriculture in spring 2017
  - 15 countries were in favour of a threshold
  - 9 countries against

Result:

- New regulation clarifying responsibilities and processes in Arts. 27-29 (41/42) and
- transitional requirements in art 29 (4) to (9)

How to deal with non-compliances and Residue findings

The concept provides clear steps to follow when suspicions at operator level raise:

- Separate and identify the product(s) concerned
- Check whether the suspicion can be substantiated
- Not place the product(s) concerned on the market unless the suspicion can be eliminated
- When substantiated or when suspicion cannot be eliminated, immediately inform the control body
- Fully cooperate with the control body

When a competent authority (control body/authority) suspects or receives substantiated information about possible non-compliance or about the presence of non-allowed substances:

- It shall immediately carry out an official investigation (the proportionality principle is mentioned in the recitals)
- It shall provisionally prohibit the placing on the market
- (in case of presence of non allowed substances) If it comes out that the operator has used the non-allowed substance or has not taken precautionary measures or has not taken measures previously requested by the competent authority, the product cannot be marketed as organic.
- In case the results of the investigation do not show any non-compliance affecting the integrity of organic products then the products concerned can be placed on the market as organic.

How to deal with non-compliances and Residue findings

- Four years after the date of application of the new Regulation, the Commission shall present a report and, if appropriate, a legislative proposal to provide for further harmonisation to the actions following the presence of non-allowed substances.

- In the meantime, Member States that have in place rules for decertify organic products containing non-authorised products or substances above a certain level may continue to apply these rules provided that these rules do not prohibit, restrict or impede the placing on the market of products produced in other Member States.

- Competent authorities shall provide a common catalogue of measures for cases of suspicion of non-compliances and established non-compliances.

The final compromise Art 29 (4)

- Four years after the date of application of this Regulation, the Commission shall present a report to the European Parliament and the Council on the state of play of implementation of this Article, on the presence of products and substances not authorized in organic production pursuant to Article 9(3) first subparagraph and on the assessment of national rules referred to in paragraph 5. This report may be accompanied, if appropriate, by a legislative proposal to provide for further harmonization.

What to do?

Let‘s use this 4 years for developing a common approach in the EU!

What is needed?

- Work for a knowledge-based discussion
- Compiling a good information background to facilitate a high level "technical" debate.
- Work toward wide acceptance of findings by a better fact-based debate
- Try to achieve new widely accepted agreement for the regulatory framework in 2025 on handling of non-compliances and suspicions of non-compliances.
- A harmonized implementation afterwards will facilitate a level playing field and consumers trust.

Research and information need

- 1. Collect, evaluate, compare and assess data from contamination findings in organic products, produced, traded, processed imported and marketed in the European Union (possible sources: companies, associations, authorities)
- 2. Put together an overview of the different strategies and requirements in the handling of contaminants in organic products in EU Member States.
  -> Taking into account the differences in administrative procedures within the Member States and the sanction mechanisms established as well as commonly established private agreements and strategies.
  -> Take care on special situation of handling of such cases for products coming from third countries.

Research and information need

- 3. Collect and evaluate **cases** of contaminant findings in organic products. Reflect on the clarification process and reasons found.
  -> Demonstrate the detection rate of the circumstances that have caused the contamination.
  -> Study and compare the sanctions established in this cases.
  -> Taking a special look for cases more MS are involved and the consequences for a level playing field.
- 4. Study the economic consequences for operators along the product chain in such cases. Taking into account cases were the product was finally decertified and not decertified. (By doing so taking into account the direct economic consequences, the legal situation, the feasibility of holding somebody accountable and the possibilities of insuring against losses)

And finally

Drafting possible scenarios for resolving handling problems of residue findings in organic products delivering:

- reliable legal requirement's and handling,
- harmonized implementation in EU member states
- high level of security of organic products and
- a level playing field,

having in mind the needs of authorities, consumers and operators.