

**Skema til afrapportering af ViD projekter**  
Videncenter for Dyrevelfærd  
2017

**1. Projekttitle:** Vurdering af juridiske konsekvenser ved brug af dyrebaserede mål i velfærdskontrol

**2. Projektleder og projektdeltagere (titel, navn, adresse, tlf., e-mail):**

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**3. Populærvidenskabeligt dansk resumé (max 250 ord):**

Formålet med projektet var at undersøge muligheden for anvendelse af dyrebaserede velfærdsmaal i lovgivning og certificeringsordninger (nuværende lovgivning omfatter næsten udelukkende ressource- og managementbaserede velfærdsmaal). Flere interessenter (f.eks. EFSA, Fødearestyrelsen og Landbrugsorganisationen SEGES) har foreslået brugen af dyrebaserede velfærdsmaal i lovgivningen. Både fordi det giver landbrugeren mulighed for at løse ethvert dyrevelfærdsproblem "på sin egen måde", men måske endnu vigtigere fordi dyrebaserede velfærdsmaal er tættere på formålet med dyrevelfærdslovgivningen end de ressourcebaserede mål. Blandt udsurgte personer i retssystemet og i Fødearestyrelsen identificerede vi tre erkendte problemområder ved brug af dyrebaserede velfærdsmaal: Subjektivitet, konstans over tid og multifaktorialitet. Konsekvenserne af disse erkendte problemer kan være en øget subjektivitet i vurderingen af graden af overholdelse samt en grad af uforudsigelighed for landbrugeren om, hvorvidt han er i overensstemmelse med lovgivningen. Vi diskuterer forskellige måder, hvorpå dette kan løses, og vi gennemgår brugen af et mål for trædepudesvidninger i slagtefjerkræ (foot pad dermatitis), et dyrebaseret velfærdsmaal, der har været anvendt siden 2001 i fjerkrælovgivningen.

**4. Populærvidenskabeligt engelsk resumé (max 250 ord):**

The aim of the project was to investigate the possible use of animal based welfare measures in legislation and certification schemes (current legislation almost exclusively uses resource and management based welfare measures). Several stakeholders (e.g. EFSA, Danish Veterinary and Food Administration, and the agricultural organization SEGES) have proposed the use of ABM in legislation. Both because it gives the farmer the possibility to solve any welfare related problem "in his own way", but perhaps more importantly because it is believed that ABM are closer to the

objective of the animal welfare legislation than are resource based measures. We identified three perceived problems with ABM: subjectivity, constancy over time and multifactoriality. The consequences of these perceived problems may be an increased subjectivity in the assessment of the degree of compliance, as well as a degree of unpredictability for the farmer of whether he is compliant with the legislation. We discuss various ways in which this can be solved as well as review the case of Foot Pad Dermatitis, an animal based measure that has been used since 2001 in poultry welfare legislation.

## **5. Videnskabeligt dansk resumé af projektets formål, udførelse, væsentligste resultater og konklusion (max 500 ord):**

Formål. Målet med projektet var at undersøge muligheden for anvendelse af dyrebaserede mål i lovgivning og certificeringsordninger sammenlignet med nuværende lovgivning, der næsten udelukkende omfatter ressourcebaserede mål (fx belægningsgrad og båsestørrelse) og ledelsesbaserede mål (f.eks. alder ved halekupering eller brug af bedøvelse). I løbet af det sidste årti er anvendelsen af dyrebaserede foranstaltninger blevet anbefalet i certificeringsordninger, ikke mindst i projektet Welfare Quality®. Som følge heraf har flere interessenter (f.eks. EFSA, Fødevarestyrelsen og SEGES) foreslået brugen af dyrebaserede mål i lovgivningen. Både fordi det giver landbrugeren mulighed for at løse velfærdsproblemer "på sin egen måde", men måske endnu vigtigere fordi det menes at dyrebaserede mål er tættere på målsætningen for dyrevelfærdslovgivningen end de ressourcebaserede mål er.

Udførelse. Projektgruppen har holdt 8 interne projektmøder samt et møde med en repræsentant fra Fødevarestyrelsen. Projektet har modtaget materialer fra Fødevarestyrelsen som supplement til projektrelevant eksisterende lovgivning vedrørende trædepudesvidninger hos slagtefjerkræ. Indsamling af data om vurderinger af juridiske konsekvenser ved brug af dyrebaserede velfærdsmaal blev baseret på interviews med udvalgte veterinære og juridiske medarbejdere i Fødevarestyrelsen og dommere i det juridiske system samt en ledende person i landbrugsorganisationen Dansk Kvæg. Projektgruppen udarbejdede til det formål et spørgescenarie og en tilhørende interviewguide. Spørgescenariet indeholdt to konkrete eksempler på dyrebaserede velfærdsmaal, dels vurdering af halthed hos malkekøer, dels qualitative behavioural assessment (QBA).

Væsentlige resultater og konklusion. Vi identificerede tre erkendte problemer med dyrebaserede mål: subjektivitet, konstans over tid og multifaktorialitet. Nogle dyrebaserede mål kan imidlertid være mere konstante over tid end umiddelbart antaget (f.eks. den tid mælkekvæg ligger ned), og nogle ressourcebaserede tiltag kan være mindre konstante over tid, f.eks. adgang til vand eller rodmateriale. Konsekvenserne af disse erkendte problemer kan være en øget subjektivitet i vurderingen af graden af overholdelse samt en grad af uforudsigelighed for landbrugeren om, hvorvidt han er i overensstemmelse med lovgivningen. Vi diskuterer forskellige måder, hvorpå dette kan løses, og gennemgår eksemplet med brug af trædepudesvidninger ved slagting af broilere som et dyrebaseret mål for velfærd.

## **6. Baggrund for projektet:**

During recent years there has been an increased interest in using animal based measures to assess animal welfare. A prime example of this is the heavy emphasis of animal based measures in the Welfare Quality® assessment protocol (Botreau et al. 2007). In science the most common argument for the use of these measures, as opposed to resource based measures, is that they are better correlated to the state of the animal and hence better measures of animal welfare than are resource based measures (Pandolfi et al. 2017).

In national legislation on animal welfare there is often an opening statement that describes the overall aim of the legislation. In the Danish animal welfare legislation this is formulated as: Animals should be treated with consideration and should be protected as well as possible against pain, suffering, anxiety, longtime hurt and major problems ("Dyr skal behandles forsvarligt og beskyttes bedst muligt mod smerte, lidelse, angst, varigt mén og væsentlig ulempe."). The statement centres on the experiences of the animal and it would therefore be natural to expect the legislation to emphasise the use of animal based measures.

Despite this, many of the certification schemes and legislations instead emphasise resource based and management based measures, e.g. "hjerte ordningen" in Denmark (Miljø- og Fødevareministeriet, 2017), McDonald's regulations concerning housing and transport (McDonalds 2017), and Arlagården (Arlagården 2017). This is perhaps most obvious in the Danish legislation concerning dairy cattle which exclusively contains resource and management based measures.

Resource based measures do have the advantage that they are often more constant over time than animal based measures, e.g. size of cubicles is not likely to change from one month to the next, nor is the trough length or number of water points. In most cases they are also easily quantifiable; this means that it is comparatively easy for the farmer to know if he complies with the current legislation. However there are some resource based measures that may vary over time, such as the quality/cleanliness of rooting material or stocking density.

Despite the historical preference for resource based measures there has been an increasing interest in animal based/outcome based measures in legislation. The initiatives have come from EFSA, as well as from the EU, more specifically in Denmark the farmers' main organisation (SEGES) has also suggested that animal based measures should be used to a larger extent in legislation (G. Grønbek pers. com.). The main reason for advocating the use of animal based measures is the perceived strong correlation between the animal based measures and the affective state of the animal (EFSA 2015), however it is also possible that part of the reason from the farmers organisation is that it would give the farmer more flexibility in how to solve a given problem.

The legal system relies on certain principles, and the implementation of animal based measures needs to be compatible with these principles in order to serve in the legal system. Legal certainty is a fundamental principle of the legal system recognized as a central requirement for the rule of law. The principle serves as for the development of legal methods by which law is made, interpreted

and applied judicially (Maxeiner 2008). Legal certainty is not a uniquely defined principle but instead upholds several legal aspects and ideals as a foundation for the rule of law.

## **7. Beskrivelse af projektets formål, hypoteser samt materialer og metoder:**

The aim of the current paper is to clarify the possible judicial consequences of using animal based measures in certification and legislation.

In the current project interviews with stakeholders, literature review and case reports were used.

## **8. Oversigt over projektets samlede resultater (herunder hvordan resultaterne bidrager til at opfylde projektets formål):**

### **Main challenges of animal based measures**

We believe that there are three main considerations when animal based measures are considered to be included in legislation or certification: Subjectivity, constancy over time and multifactoriality.

#### ***1. Subjectivity***

The first is that animal based measures are by many considered to be "soft", or subjective (Whay 2017). The level of perceived subjectivity will vary with the type of measure. Behavioural measures are for example often perceived as being "softer", than e.g. pathological changes like cell count in cow milk, or size of shoulder wounds in sows and human inflicted skin lesions in slaughter pigs, that are perceived as more easily quantifiable (Saxmose et al. 2015, Barrington et al. 2016). Recent studies, e.g. Tuytens et al (2014) have however shown that differences between measures may be smaller than generally thought. The evaluation of animal welfare using either QBA or panting was both affected in a similar way by the experimentally induced preconceptions of the observers.

#### ***2. Constancy over time***

The second consideration is that the measures may vary over time. A number of the measures included in the Welfare Quality® have been shown to be highly constant over time, e.g. the average lying down time in a dairy cattle farm has been shown to have a Kendall coefficient of 0.7 over a time period of 6 months (Brörkens et al. 2009). Unfortunately very few animal based measures have been studied over such a long time period, and we therefore lack data on the repeatability of many of the possible measures. A lack of repeatability over time, and especially over seasons, does not mean that a measure is not valid however. If panting is used as a measure of thermal comfort for sows it probably better reflects the experiences of the animal, despite having a higher frequency in summer than in winter, than does the presence of a cooling system such as showers. One of the advantages with the resource based measures here becomes obvious however, since the presence/absence of the showers may be noted irrespective of the time of year, i.e. in this example there is a potential conflict between practicality (it is impossible to only visit farms on

warm days) and validity (the presence of showers does not guarantee that they will be used), neither does the presence indicate the need for panting - because this need varies with other housing facilities.

### ***3. Multifactoriality***

The third consideration is that a given animal based measure, e.g. lameness in cattle, may have many different causes; it may be caused by floor surface, feeding, or infection (Potterton et al. 2012). This does not make it a poor animal welfare measure, since it is correlated to the experiences of the animal, but it does make it more difficult for the farmer to know how to improve it. It therefore becomes more difficult to speak about the intention of the farmer and this may have important consequences for the way the legislation is written.

### **Law and legal requirements**

Most countries follow one of two major legal traditions: common law or civil law.

In Denmark the legal system is based on civil law. This legal system has its core principles codified into a system of law, which serves as the primary source of law. Civil law is thereby based on fixed codes and statutes. Here the role of the judge is to establish the facts of the specific case and to apply the provisions of the code. This is in contrast to common law systems which system is characterized by case law, which is law developed by judges through decisions. Common law gives judges an active role in developing rules. Here judges decide matters of law and make rulings, which are used to rule on future or present cases.

The system of animal-based measures has to work within the Danish legal civil law framework. This framework relies on certain principles, and the animal-based measures need to be compatible with these principles when being implemented.

### ***Legal certainty***

Legal certainty is a fundamental principle of the legal system in Denmark (Mariager 2012). The principle is regarded as a foundation of the rule of law because it ensures certain absolute rights for the citizens. Oftentimes, the concept of legal certainty is divided into two categories: the collective and the individual legal certainties (Henrichsen 2001). The collective legal certainty concerns the social order and the protection of the interests of the community. This includes the Authority's power to enforce legislation and to ensure there are consequences for non-compliance. The individual legal certainty revolves around the protection of the rights of the individual, which leads to the need for the laws to be governed and foreseeable. In the legal practice, the two categories work hand in hand, as the tasks of the Authority are balanced against the protection of the rights of the individual.

The principle of legal certainty contains several important elements that legislators consider when they draft legislation (Høilund 2015) The key element is the predictability of the law. It is necessary that an individual operating in society can predict and foresee his or her legal status. Predictability protects the individual against violations of their rights and ambiguous treatment of the Authority. For this element to be implemented and in full effect, the Authority has to base its decisions on regulated rules. Legal certainty also presupposes that legislation provides information

about the legal position of the citizens with clear liability rules, which will be enforced in an effectively and homogenous manner. The Authority has to carry out its power on the basis of legislation, and the rights of the citizens can only be limited by the basis of law. Therefore, the core of the principle of legal certainty is based on predictability of the regulated use of power and the prohibition of arbitrary decisions (Dyrn 2010).

### ***The question of guilt and objective liability***

The three considerations, subjectivity, constancy and multifactoriality, all affect the level of controllability and predictability experienced by the person in charge of the animals. In legislation it is in most cases the intention of the individual that determines if or to what extent the agent is to be sanctioned. In order to incur liability it is required that the objective provisions of the rule have been violated, e.g. that the stocking density is higher than is permitted.

However, in order to attract criminal responsibility the objective elements of a crime shall be accompanied by the requisite state of mind (Smith 2013). The state of mind is the agent's attitude towards the objective elements in the form of intention or negligence, in the previous example whether the farmer intentionally stocked too many animals in the pen, or whether the farmer did not take enough care to control that the stocking density was appropriate. The subjective element encompasses both intentional and negligent behaviour and considers them both equally blameworthy. Have the farmer neglected to foresee prohibited consequences of his conduct he is held responsible to the same extent as if he has willfully not complied with the legislation. If there is no intention or negligence the agent cannot be held guilty and receive sanctions.

There are exceptions, and in some instances, the legislation imposes an objective or so-called strict liability (von Eyben, 1994). The objective liability does not require the proof of the subjective element. In this case, the intentions and neglect of the agent is set aside and the responsibility is based on the outcome of the action. Danish legislation contains a few examples of objective liability, one of which is the legislation on environmental damage (Miljøskadeloven - based on the directive 2004/35/EF). This legal act imposes an objective liability for damages on the environment concerning different activities. The objective element means the responsibility for damage arises regardless of compliance with the rules and safety recommendations. The legal act defines "environmental damage" as damage to protected species and natural habitats, damage to water and damage to soil. Operators carrying out dangerous activities as listed fall under objective liability. In the legislation it is up to the authority to decide if there is an activity that can be defined as an "environmental damage". In case of damage the authority can then order the operator to restore the conditions by corrective actions. Similarly owners of dogs and horses have an objective liability, i.e. they are responsible for the actions of their animals irrespective of whether they have handled the animals in a responsible manner.

The objective liability is incorporated as an element for encouragement for responsible conduct and considerate behaviour in specific situations in the belief that the agent will take certain precautions to avoid being held responsible. For preventive reasons objective liability is incorporated with fines as the main sanction.

## **The question of objectivity versus relevance**

### ***Discretion in legislation***

There are two fundamental methods by which legislatures can draft legislation (Rønsholdt 2014). One method is to draft the legislation in minute detail, describing the goals, prescribed activities, and punishments with specificity. This leaves the relevant authority with clear and transparent rules to enforce. Another method for the legislature is to avoid describing the specific legal acts, or describe them without specific details. This allows the authority to have a high level of discretion when enforcing the legislation.

There can be different reasons for the authority to be given discretion in legislation. One reason is that it is practical impossible to describe the legal acts adequately. Also the legislators oftentimes may believe that certain cases should be evaluated on a more individual basis, without applying specific rules (Christensen, 1997). This can be the case in situations where it is practical impossible to take every circumstance and reasons for the outcome into consideration. Discretion is therefore often used in cases where the authority needs to make an overall assessment, and in situations involving many influential factors that need to be taken into consideration. An example of this issue is the forced abduction of children (Serviceloven § 58). In these cases, many factors are relevant for the decision and prescribing what is a “good home” and “a good parent” is not possible. Instead, it is left for the relevant authority to decide when the reasons are adequate or not to incur liability. The legislation on transport of animals also prescribes a degree of discretion for the authority (Council Regulation on the transport of animals art. 3, litra b). The transport act states that an animal may not be transported if in such condition that the transport cause undue pain, distress or suffering to it. Consequently, the fitness of an animal for transport must be determined. This determination involves a degree of discretion, since the regulation only prescribes, in broad terms, the issue at stake.

Deciding to provide the Authority with of a degree of discretion can be detrimental for the predictability of the legal position, as it increases chances of ambiguousness. Discretion necessitates several legal requirements for the Authority to apply when carrying out its power. These legal requirements ensure that the resolving decisions are correct and legal, and they consist of equality for the law, proportionality and the prohibition of arbitrary considerations for decisions. These requirements all flow from the principle of legal certainty (Henrichsen, 2012).

In substance, the animal-based measures have to be compatible with the above key elements of legal certainty. This means they have to be enforceable for the authority and prescribed in legislation for the farmer to predict his legal position. The legal system then proposes different options as to how the measures could be incorporated. If the legislators make use of objective liability it is the outcome of the animal welfare that is described and prohibited in legislation. The consequence would then be that the detection of a specific regulated outcome would be met with direct punishment by the Authority. Another option is prescribing a degree of discretion for the Authority, which is seen in the case of footpad lesions in Danish legislation. This leads to evaluate

the intentions of the farmer and possible excusable reasons for the detected welfare to be taken into consideration before any possible consequence.

## **Experiences with an animal based measure, the case of foot pad dermatitis**

### ***The legislation***

Danish legislation prescribes surveillance of foot pad lesions at slaughter as an indicator of on-farm broiler welfare. The regulation was incorporated into legislation in 2001, based on the desire to improve animal welfare for broilers. One of the main reasons for implementing the legislative act was the acknowledgement of the varying causes for foot pad dermatitis. It was found that incorporating all parameters into legislation was not the ideal solution. Instead, a solution with a surveillance system using specific indicators for broilers was chosen with sample controls of footpad lesions used as indications of welfare problems on the farm.

The system, originally developed in Sweden, comprises a 3-point scale in which the degree of the footpad lesion is reflected. In total, 100 feet per flock (2 x 50 feet) are sampled from the processing line at slaughter for scoring. A flock score, ranging from 0 to 200, is subsequently calculated for each flock with direct enforcement implications. If the samples have a sum of maximum 40 points, there will be no consequence. Whereas with a final score between 41 to 80 points, the legislation prescribes the official veterinarian to make a recommendation regarding changing the inadequate conditions. If the next samples of broilers is not under 41 point score, the official veterinarian has to file a report to the Authority. Between 81 to 200 prescribes the official veterinarian to file a report immediately.

The legislation establishes necessary actions of enforcement and consequences as a result of the score level from the samples of lesions. In the light of the uncertainty of the cause of footpad lesions, the legislation provides the authority with some discretion when deciding the consequences of non-compliance. Based on the received reports the authority evaluates if there is a need for an on-farm control visit, or if the conditions can be rectified by simply contacting the producer. This contact may include an injunction requesting that the producer amend their inadequate conditions, or that the producer create a plan of action that refers to the specific new approaches that need to be implemented.

### ***The effect of the legislation***

Since 2002, the control of footpad lesions of broilers has taken place, on the ground of the incorporated surveillance system in legislation. The welfare control results of this monitoring system have demonstrated a significant decrease in the number of footpad lesions of broilers since the legislation was adopted (Det Danske Fjerkræraad 2011).

As mentioned, it was the desire to improve welfare for broilers that led to the incorporation of the surveillance system of footpad lesions in legislation. When seeking to improve animal welfare, the legislative acts mostly concern requirements of resource-based measures, which often lead to detailed legislation on relevant issues at stake. It is difficult for the legislators to take every



scenario that might cause poor welfare into consideration when drafting legislation on animal welfare. Animal welfare is complex, and the issues causing poor welfare is often multifactorial. Footpad lesions can have varying causes. Therefore, solving the problem strictly by implementing detailed legislation on resource-based measures would have been a challenge. It is therefore doubtful a corresponding reduced frequency could have been accomplished with resource-based measures alone.

### ***The implementation and enforcement of the legislation***

According to the authority, the enforcement is based on a case-to-case evaluation, while aiming to develop a uniform legal practice. A review of case law on the area demonstrates how the authority recognizes the varying causes for footpad lesions by taking excusable reasons into consideration in the enforcement (e.g. changes in feed composition). Have the reasons been dealt with by relevant actions to change the outcome, the authority will take no further actions but continue to monitor the score. Have no actions been taken, or are they not perceived as sufficient with relevant documentation to change the inadequate conditions, the authority will make use of a more severe consequence.

A general degree of flexibility is detected in a sense of corporation and consultation between the authority and the producer, making the system less rigid with room for a choice of consequence in order to reach the best outcome.

As an animal based measure, the legal act demonstrates a different way of implementing and enforcing animal welfare legislation. The objective of the law is distinctively set out as to improve the welfare of broilers. In the understanding of the legal limitations by the many factors involved, the legislators chose the system of footpad lesions as seen best fit for the purpose. In the light of the uncertainty, the authority is granted a degree of discretion. The authority thereby has to enforce the legislation by balancing the degree of discretion by taking the uncertainty of the producer into consideration while reaching the objective of the legislation.

In many ways, this is in contrast to implementation and enforcement of the resource-based measures in legislation. These measures are objective and ascertainable and prescribes easily in a legal framework.. Enforcement of these measures is met by direct punishment by the authority, and it seems the system is rigid and inflexible.

### **Acceptance of new measures**

As mentioned above, we believe there are three main considerations concerning the implementation of animal-based measures: that animal-based measures are perceived as subjective, inconsistent over time and multi-factorial. These all correspond to certain legal considerations, and were affirmed by interviews that we conducted regarding the legal challenges of implementing animal-based measures into legislation. The interviews were conducted as a semi-structured interview as formulated in our developed interview guide in which a number of aspects was covered, the emphasis on the different topics varied according to the experiences and expert knowledge of the participants.

In total, eight people participated in the interviews, which took place from 6th June until 4th of July. The participants all had different backgrounds, but common to them, was their expert knowledge in the area. The participants included a Defense Attorney with specific experience in agriculture, a Special Veterinarian Consultant from the Veterinarian Unit of the Ministry of Environment and Food, a Judge at District Court, a lawyer at the Veterinarian Unit of the Ministry of Environment and Food, the Chairperson of cattle in the Industry of Agriculture, the Head of office at the Veterinarian Unit (Lawyer), the Vice State Prosecutor and the Chief of Justice at the Court/Chairperson at the Animal testing Supervision Board.

Before any interview, a brief introduction to the two categories of measures was given as to ensure a common understanding for the measures was shared.

In addition to the questions regarding legal aspects, the respondents were asked to consider two animal-based measures for dairy cattle, one of which was lameness, and the other one was Qualitative Behaviour assessment as described by Wemelsfelder & Lawrence (2001).

The aim of the interviews were to serve as an insight to the possible acceptance of implementing the measures into Danish legislation, while shining a light to specific legal challenges in this regard.

### ***Results from the interviews***

#### **Subjectivity**

Animal welfare legislation is mainly based on objective, comparatively easy ascertainable resource-based measures, which makes it comparatively easy for the farmer to know if his farm is operating in a manner compliant with current legislation.

The consideration of subjectivity relates to a shift from the clear objective to the incorporation of a more subjective element in animal welfare legislation. Therefore, concerns on the subjectivity of animal-based measures relate to the possibility of evolving a uniform practice by enforcement of the legislation and the possibility for the animal care taker to know when compliance is reached.

*“It’s difficult to treat everyone equally with animal-based measures and repeatability is difficult to reach when people are involved.”*

Defense Attorney

The interviews demonstrate that many of the participants have concerns regarding the implementation of legislative measures that had high levels of subjectivity. This is, for example, brought forward by the Head of Office at the Veterinarian Section:

*“With QBA the subjective element is increased, and you have moved away from the objective ascertainable. In that way it cannot stand alone but it can clearly be included.”*

Head of Office at the Veterinarian Unit

This means the measures that are perceived as more subjective and “soft” are more difficult to incorporate, as they are further removed from the existing legal system.

However, lameness is an example of an animal-based measure that is perceived more objective and easy to assess, which makes it easier to implement into the legal system.

*“Lameness seems easy to assess and regulate on, whereas, QBA would require detailed regulation for the producer to know how to assess the welfare.”*

Judge at District Court.

The detected reluctance to the subjectivity in legislation can be caused by the legal tradition, which demands the objective element of the offence being prescribed clearly and detailed. Nevertheless, subjectivity is already an element in the legal system, and the human aspect is always a part of the enforcement of legislation.

*“The training of using the animal-based measures is the same as with other legislation, so it is no different with this control measure.”*

Judge at District Court.

Furthermore, the legal system builds on the inclusion of subjectivity, as the intentions and negligence are part of the element to incur liability, which needs to be evaluated by the court. In addition, the human aspect of subjectivity also plays a vital role in the system when witnesses and their testimony serve as important evidence in the court.

### **Constancy over time**

The consideration of constancy relates to the possible lack of repeatability of the measures. The resource-based measures are often more constant, but the animal-based measures are better correlated to the state of the animal. It seems the balance of repeatability and validity is a question for legislators when seeking to implement animal based measures. The repeatability is of importance as to both the collective and individual legal certainty. The farmer must be able to predict his legal position according to legislation, and the authority must be able to detect non-compliance and enforce legislation based on solid and robust measures. Many participants acknowledge the fact that legal certainty is closely linked to objective ascertainable measures prescribed in legislation. However, this makes the legislation very rigid and detailed regulated. And the intended secured and improved animal welfare outcome is not always a result. The interviews demonstrate an overall agreement among the participants (interviewees) that resource-based measures are very suitable for the existing legal system, as they are objective and ascertainable.

*“The use of animal-based measures provides the opportunity of discretion, whereas the resource-based measures are easier to handle for the producer and for the controllers”.*

Veterinarian jurist at the Ministry of Environment and Food

However, it is important to recognize that resource-based measures are not always the best choice, depending on the objective of the legislation.

*“In the best of all worlds you should use the animal-based measures, as they indicate the actual welfare of the animal. The other is a workaround measure but easy to apply and control in legislation.”*

Head of Office at the Veterinarian Unit

Implementation of the animal-based measures means a shift in the current manner of drafting legislation on the area. The interviewees agreed that legal certainty is closely linked to the use of resource-based measures, but shared an understanding for the need for a change in legislation on animal welfare.

*“As a judge and jurist I should believe in the objective resource-based measures, but it is my experience we are going in a direction of more discretion and individual evaluation and we cannot keep regulating in details”*

Chief Justice of District Court

This is also because the legal system cannot keep up with the constantly new scientific findings on animal welfare and the need to move away from detailed rules and regulations.

It seems that in the case of animal-based measures, there is a perceived paradox between the need for legal certainty and reaching the objective of legislation. A balance between repeatability and validity needs to be found, which is also implied. At this point, the legislators need a selection of animal-based measures that can be implemented with the existing system, while maintaining a more favorable attitude towards discretion and subjectivity/while simultaneously implementing the use of more discretion and subjectivity.

### **Multifactoriality**

The level of animal welfare can have many different causes, which makes it difficult for the farmer to know how to improve farm conditions to be in compliance. This also gives a legal challenge, since it is a key element of legal certainty to be able to predict one's legal position.

*“One needs to draw attention to the question of legal certainty when making use of animal-based measures. The farmer needs to be able to understand what exactly to do in order not to commit an offence.”*

Vice State Prosecutor

If a farmer does not know how to comply with legislation, the intent and negligence of the farmer when incurring liability is hard to determine.

There are two ways of dealing with this consideration in terms of legislation. One way is the use of objective liability, which does not require any subjective element. This would have the consequence that non-compliance would be met with direct punishment by the authority (Toftgaard 2014). As this is the most stringent liability, it provides for the measures to be objectively described with criteria the farmer can use as guidance.

Another way is the incorporation of discretion for the authority, which is seen in the case with surveillance of footpad lesions in legislation. The use of discretion in legislation provides the Authority with the possibility to consider the farmer's intent, and allows the consequence to resemble the factual situation. In the case where the causes are excusable and the farmer has made efforts to change and prevent the outcome, this will serve as part of the Authority's evaluation.

*"We need to move away from detailed regulation and use more discretion which the legal system can handle."*

Chief Justice of District Court

How animal based measures are implemented into the legal system will affect the judicial requirements they must meet. As animal-based measures have many different causes, the measures can be incorporated into the system in different ways.

*"The animal-based measures are complicated with the chance of many influential parameters. How the uncertainty will function in the legal system is questionable."*

Special Consultant at the Veterinarian Unit of the Ministry of Environment and Food

One way is to implement the measures as a "top up" on the existing resource-based measures. Since the resource-based measures set a minimum standard of animal welfare, the animal-based measures would serve as an indicator as to detect if the intended animal welfare has been achieved without the need for drafting detailed legislation.

The consequence of the non-compliance could take into account and resemble the uncertainty of the farmer. This would mean that in the cases with a high level of uncertainty for the farmer as to what is the exact cause, the consequence could be low. By providing the Authority with a degree of discretion in the choice of consequence, depending on the severity of non-compliance and the intentions of the producer, it would be possible to take the factual elements into consideration. Many interviewees mention the need for instructions and consultation by the Authority to be combined with any consequence.

*"Regardless if the system is old or new, it is the producer's skills that dictate the animal welfare. More legislation and sanctions are not the way to go but instead instructions and consultation with the Authority will serve for the best outcome"*

Chairman of Cattle, the Industry of Agriculture

The question if punishment is even the correct tool for animal welfare noncompliance is also put forward:

*"I doubt if punishment is even the correct tool. Can the producer present he has tried his utmost best then we can take it into consideration."*

Chief Justice of District Court.

The interviews also demonstrate the possibility of the measures with an increased element of subjectivity and unpredictability to be incorporated as a screening tool in legislation.

*“The animal-based measure could be used as a screening tool for follow-up control. This is a good way to use the animal-based measures and it provides the chance for us to increase the efficiency where it is needed.”*

Special Consultant at the Veterinarian Unit of the Ministry of Environment and Food

The result of the screening could then determine if further control visits are necessary before any punishment is given. The animal-based measure would serve as a tool to improve the effectiveness of the welfare assessment and the measures implemented without direct punishment, which would also lead to increased legal certainty for the farmer.

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## **9. Diskussion af projektets resultater:**

### **Discussion**

This article has addressed the main considerations arising when seeking to implement animal-based measures into legislation as compared to resource based measures. This is of importance as the interest of developing and introducing these measures into legislation in order to improve animal welfare has been increasing. Currently, however, animal welfare legislation still builds on mostly resource-based measures, as these measures are very compatible with the legal system being relatively easy to assess, less subjective and highly repeatable. For the animal-based measures to be incorporated into the legal framework they have to be compatible with the legal requirements. In this regard, some challenges and considerations have been presented.

A first consideration that came up was, whereas resource-based measures are objective and easily ascertainable (e.g. controlling size and design of enclosures), animal-based measures tend to be more subjective (e.g. lameness scores). This makes it more difficult for the farmer to know whether

he is compliant with legislation. In addition, subjectivity seems to stand in the way of incorporation into the legal system, as the current legal tradition demands the objective element of the offence to be prescribed clearly and detailed. A second consideration that was presented was the possible lack of repeatability of animal-based measures. Resource-based measures are suitable to be assessed in the same way over time, while this is more difficult with animal-based measures (or for which we at present lack sufficient knowledge). Again, this presents a challenge for the farmer to predict his legal position according to legislation. Finally, animal-based measures can have different causes. It is up to the farmer to take the appropriate actions in order to achieve the objectives of the described measures in order to not commit an offence. This brings about challenges with regard to the farmer's liability and for the Authority it becomes difficult to detect non-compliance and enforce legislation.

### ***Liability and punishment***

In the legal system, punishment is used as retribution and for deterrence, while at times for the sense of justice. Depending on the policymakers, the different aspects can have more or less importance in the different legislative acts.

The main purpose of using punishment is to avoid certain actions and omissions in our society, which are considered detrimental to reach the objective of legislation. The potential consequences for not being in compliance should, as such, function as a preventive measure. (Balvig 2006)

The preliminary provisions in the Danish Animal welfare act set out the objective of the welfare legislation; animals should be treated carefully, properly and protected as best as possible from pain, suffering, fear, disablement and major inconvenience. The specific aim of the regulation seems quite vague in the wording without a clear definition of the intended animal welfare outcome, which is often the case with animal welfare regulations (Lundmark 2016). Nevertheless, to reach the objective the legislation builds on resource-based measures to prevent and predict poor animal welfare.

Danish animal welfare legislation currently prescribes punishment, e.g. fines and potentially prison time, or both, as a consequence for non-compliance. From the cases received from the Authority it seems that non-compliance of resource based measures in this area is met with direct punishment from the Authority. This can be seen in the light of animal welfare legislation being mainly based on resource-based measures, which are implemented to prevent and predict welfare issues and are regarded as minimum standards that the farmer must meet. Furthermore, these measures are easy ascertainable, and non-compliance is mostly detected quite easily and the farmer is therefore held liable and met with direct consequences when not compliant. As a consequence, individuals who are subjects to the law strive to be in compliance, in order to avoid punishment. However, many times, in the realm of animal welfare legislation, it is the farmer's skill's and farming abilities that dictate the outcome. So, in the area of animal welfare, the legislation is less than perfectly correlated to the objective of the legislation.

When it comes to animal-based measures, punishment is more difficult to apply, as they raise some considerations in regards of legal certainty. The case of the footpad lesions described in the first



chapter has demonstrated how a level of discretion for the Authority in the choice of consequence can be incorporated in the legal system, and generate positive results. A general interest in making use of discretion and evaluation in animal welfare legislation is also detected from the interviews. According to the interviewees, animal-based measures are best compatible with the use of discretion.

One advantage of applying discretion with different options for the Authority is that the Authority will then have the possibility to take factual aspects of the situation into consideration before punishment. This allows the Authority to have a high level of discretion when enforcing legislation, bringing about the opportunity for guidance and consultation instead of direct punishment. This might very well have a better preventive effect with future less cases of in compliance. This is very useful in case-by-case situations involving many factors that need to be taken into consideration. However, a disadvantage could be the increased power the Authority is given, and the possibility of a lack of consequences for non-compliance in certain cases with the result of poor animal welfare.

### ***The future of implementation of animal-based measures***

It seems there is a need for the use of both animal and resource-based measures in animal welfare legislation, both separately and in combination with each other. Especially in animal welfare cases that may have many different causes, animal-based measures are best implemented as a “top-up” on the existing resource-based measures. This would also provide as a way of measuring if the preventive efforts have been effective and resulted in the state of welfare aimed for. If the animal-based measure were to replace the resource-based, it would require the given measure to have a certain level of consistency over time and be objectively described so the farmer could know how to be compliant. Another way would be to implement given animal-based measures with a minor consequence or as a screening tool for further control. This would not give rise to the same legal challenges.

In any case, depending on the specific considerations of the given measure and the objective of the legislation, it seems the legal system can make use of specific chosen measures while simultaneously not compromising the legal certainty as a fundamental principle in the rule of law. However, as the implementation of animal-based measures into law does give rise to certain legal challenges, these measures must be considered and placed into a legal context with careful attention.

## **10. Konklusion og perspektivering (herunder forslag til opfølgende projekter):**

### **Conclusion**

### **Perspective**

When seeking to implement animal-based measures, there seems to be a paradox between the need for legal certainty and the goal of the legislation. Therefore, special attention needs to be given to

the balance of these two, in the light to the possible future implementation of animal-based measures.

The implementation of animal-based measures gives rise to challenges concerning legal certainty, with the result that these measures are most likely not going to reach the same level of legal certainty as the resource-based measures. However, while resource-based measures are suitable to prevent poor welfare and identify risk factors, animal-based measures are perceived as better correlated to the actual state of the animal. Therefore, it seems that animal-based measures can better provide access to the resulted animal welfare in the light of the aim of legislation.

It is for the legislators to decide if the purpose of the requirements should be preventing poor welfare, or measuring the animal welfare outcome, or perhaps even both. Therefore, it is of importance to decide upon the intent of the legislation and the objective set out to achieve, in order to make use of the best suitable measures for the purpose.

### **Suggestions for future projects**

The current project should be viewed as a pilot project. If Animal Based Measures are to be introduced in the legislation a comprehensive review of e.g. which ABMs are suitable and what resource based measures may they replace. The question of how the legislation should be formulated (e.g. level of discretion, as well as if it is to be a replacement or "top up" alternative) have to be investigated for the specific cases since it will probably depend on the ABMs chosen.

**11. Redegørelse for hvordan projektet og projektets resultater har været eller forventes offentliggjort:**

Artiklen, som i ovenstående afsnit er præsenteret i manuskriptform forventes publiceret i et internationalt tidsskrift i 2018.