1 Problem Focus

One of the overall conclusions from the PARADYS project\(^1\) was that “participatory science governance itself may cause serious trouble when it is embedded in a formal procedure with a relatively strong legal framework.”\(^2\)

Taking this as an example, the main problem discussed in this paper is that the legal system might be dysfunctional to various political participatory ambitions. Participation imply inclusion, but we see examples of exclusion that originate from the internal operations of the legal system. Considering the many instances of participatory instruments embedded in legal frameworks in many sectors of society, for instance environmental matters, it is important to ask the question what kind of problems the law might cause and the reasons for these problems. With environmental law and regulation of genetically modified organisms (GMO) as an example, this essay analyses the paradoxical tendencies of the legal system to exclude citizens even when regulations have the purpose to include citizens. The scientific residence of this essay is sociology of law.

1.1 Public Participation\(^3\) in Environmental Law

Environmental law is a good example of an area where there has been a political need for public engagement. David J Fiorino has provided an overview of such mechanisms with respect to environmental risk.\(^4\) According to him, there are at least five types of such mechanisms: public hearings (workshops, seminars etc.), initiatives (enable citizens to place issues on the ballot for voter approval), public surveys, negotiated rule making (‘decentralised’ rule making with the authority) and citizens review panel (‘jury like model’). There are a numerous examples of these types and different ways to institutionalise them. The mechanism chosen in each case is depending considerably on the matter in question, the political ambitions but also the regulative culture. The mechanisms can be more or less made legal, i.e. brought into the legal system or the administrative system. In an overview one type is labelled ‘Legal public hearing’, but it is rather a question of how much these mechanisms are depending on the legal-administrative system.\(^5\) Of special interest for this essay are those instances when the participatory mechanisms are brought into the legal system and when a normative conflict arises as a consequence.

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3 The concept of participation has been elaborated by Rowe & Frewer (2005) who have argued that the concept of public engagement include public participation, public communication and public consultation. However, here the concept public participation will be used as the general term. See Rowe, G. Frewer. L. J., A typology of public engagement mechanisms. Science, technology & human values. 30(2): 251-290.
If we move to Sweden and the Nordic countries (with a fairly similar, Nordic legal tradition), there are several examples of studies made in order to investigate the effects of different participative regulations. In environmental law, there is e.g. the institute of environmental impact assessment (EIA) which provides for ordinary or extended consultations with concerned citizens depending on the matter. These consultations are directed both to those who are particularly effected by a project in a more narrow sense as well to those who are effected in a more general sense. The scope of the consultations is depending on the severity of the project. Other examples are regulations to ensure right to information or access to justice. The subsequent question is how these participatory mechanisms work, are they effective?

When five large Nordic development projects were assessed, the over all conclusion was that “In three of these cases the EIA process seem to have had limited influence on planning and decision making. In one case the EIA process clearly had an impact and in one the role is unclear.”6 Reference to international work indicates the same results.7 A socio-legal study made on the consultations within the EIA process on a large infrastructure project concludes that “the law has not been an active, living part of the process.”8

Another comprehensive study with focus on the deliberative aspects came to similar conclusions. Linda Soneryd investigated the deliberative aspects of the EIA process of the planning of an airport.9 The author found similar results when it comes to the legal aspects and noted that some local residents hired a lawyer who could speak for them. Soneryd concludes that the general exclusion mechanisms identified are the ways of thinking and talking about the environment as well as institutional constraints because of the dominant role of the developer and the administrators. She also notes that “deliberations are more effective when they are unplugged, that is outside and relatively autonomous in relation to the decision-making structure than when they are plugged-in to formalised decision-making structures”10. Another observation is that there might be a contrast between public involvement at the initial planning of a project and at the later stages when place and other features of the project are roughly decided.11

Having indicated that participatory regulations not always have effect and can even be dysfunctional, the next part will investigate this problem. It is of course

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10 Ibid p. 60.
possible to undertake such an investigation from different standpoints. This essay focuses on the role of the legal system. Up till now, law is treated as a black box; law is an institution having certain effects on society. In the case of participation it is assumed that formalising participation legally or bringing in participatory mechanisms in existing legal institutions can imply normative conflicts. Such a conclusion is common in the field of law and society or law and sociology. But which are these conflicts, what is the nature of them? To answer this question, it is necessary to scientifically open up the legal system. Therefore we need an example which can provide the effects of the participatory regulation, as well as the internal operations of the law. The Swedish GMO licensing procedure will serve as this example. The case that will provide the data about the regulation as well as its operations is the Swedish case in the PARADYS-project.

2 The Swedish Legal-administrative System Concerning GMO

2.1 The Swedish GMO Regulation

Starting with the overall picture, the legal domicile of the GMO regulation is within the Environmental Code (EC) which is in turn located in the public administration sector of the legal system. The ambition of the comprehensive environmental code has been to gather all environmental regulation under one framework. The reason for this location is that environmental problems - due to the character of them - are not considered possible to regulate within private law. Environmental conflicts are today considered to be a political problem that can not be left to the market to handle, and the regulation of GMO is thus often located within the public law sector. However, this does not mean that other parts of the legal system is left out. The environmental code is mostly directed towards the public institutions, although some parts or some elements address anyone that are about to take actions that might effect the environment. Deliberate release of GMO is thus a matter for the public institutions.

The Environmental Code is very comprehensive, and chapter 13 of the EC is devoted to GMO. Besides chapter 13, there is an ordinance (SFS 2002:1086) with detailed regulations on deliberative release of GMO. In the sector of plants, deciding authority is the Swedish Board of Agriculture (SBA). The board is in control of the procedure from application to decision. In sum, an application of deliberative release of GMO is sent to SBA which refers it to two other governmental agencies (the Swedish Environmental Protection Agency and the Swedish Gene Technology Advisory Board) and eight other referrals. After the
consultations, SBA decides the case. According to the law, the SBA is supposed to evaluate the application from a risk perspective and from an ethical perspective.

In order to get some idea of the law, the sections in the GMO-chapter will be accounted for here with translations that are not official, but reflects the content of the sections with respect to the purpose of this contribution.

Field of application

§ 1. The provisions in this chapter shall be applied considering contained use and deliberate release of GMO. It shall also be applied when products containing GMO is released onto the market.

The purpose of the regulation is, in addition to chapter one, section one [sustainable development]; to safeguard that certain ethical considerations are taken at activities stated in section one.

§ 2. The government can issue regulations about exceptions from this chapter concerning such organisms that has been developed by methods proven to be of no risk to health and environment.

Definitions

§ 3. Organism...

§ 4. Genetically modified organism...

§ 5. Contained use...

§ 6. Deliberate release...

§ 7. Release onto market...

Demand for investigation for risk assessment

§ 8. Contained use and deliberate release of GMO shall be proceeded by an investigation. It shall provide a sufficient assessment of the effects the organisms can cause on health and environment. The investigation shall be made according to science and experience. Such an investigation shall also be done before a product containing GMO is released onto the market.

§ 9. The government or the authority the government decides, can issue regulations about such an investigation in § 8.

Ethical considerations and precautionary measures

§ 10. Certain ethical considerations shall be taken at contained use and deliberate release of GMO and when a product containing GMO is released onto the market.

§ 11. The government or the authority that the government decides can issue special regulations regarding precautionary measures.

Demand for permit and duty to report

§ 12. A permit is needed when releasing deliberately or when releasing a product onto the market that contains GMO.
§ 13. A permit can be given only if the activity is ethically justifiable.

§ 14. The government or the authority that the government decides can issue regulations regarding demands for protection of health and environment in order to get a permit according to §12.

§ 15. The government or the permitting authority can issue regulations about exceptions from the demand for permit according to § 12.

§ 16. The government or the authority that the government decides can issue regulations regarding demand for permit or reporting of contained use if needed for health or environmental reasons.

§ 17. Application for permit and reporting is done at the authority the government decides.

Questions concerning permit shall be decided within the time limit the government decides.

A permit is valid for five years, unless the permit states otherwise.

**Labelling**

§ 18. The government or the authority that the government decides can decide that anyone that releases a product containing GMO onto the market shall label it.

**Gene technology advisory board**

§ 19. A special board, the Gene technology advisory board, shall monitor the development of the gene technology, monitor the ethical issues and give advice on the application of the gene technology.

The government issues regulations about the duties of Gene technology advisory board and of the composition and procedures of the board.

### 2.2 Legal Rationalities

Since the problem of law’s excluding effects seems to be general, we have to look into law’s general way of operating instead of looking to the single statues. And since this essay is about participating, it is eligible to use a perspective that can understand law’s capacity in this respect. The notion of ‘reflexive law’ developed by Günther Teubner entails participative aspects of law.\(^\text{15}\) The concept of reflexive law is part of a discussion on law’s capacity to function in or adapt to a changing society where complexity is one of several key factors. The discussion assumes a development where the crisis of one legal rationality - formal law - is followed by another legal rationality - substantial law, which due to another crisis in turn might be followed by a third legal rationality - reflexive law. Irrespective of the developmental aspect, these three rationalities of law are useful when analysing the legal design of modern law.

One reason for the conceptual model developed by Günther Teubner is its combination of internal aspects of law as well as on external aspects of law. To fully understand law’s interaction with other aspects of social life requires both the juridical internal perspective and the external social perspective. Teubner’s socio-legal perspective is really a framework, within it is possible to further

develop and study law and social life. Although the main question for Teubner is on the development of legal rationalities, a diachronic perspective, I believe that this framework also can be used synchronically. Later this point will be developed using Kaarlo Tuori’s theory of a multi-layered view of law (critical positivism).

Teubner’s analysis includes three dimensions: justification of law, external functions of law and internal structures of law. It is not suggested that a regulation or a program belongs to only one type of legal rationality; rather it is an empirical question how each regulation is designed with elements from these different rationalities. It is also an empirical question how a regulation actually operates, due to the context, its legal design etc. The perspective presented by Teubner is primarily not a method on how to identify these different rationalities, but rather a development of theoretical concepts. To use this perspective empirically, some sort of method have to be developed.

With reference to the Swedish discussion and notion of framework law, Håkan Hydén has elaborated on the discussion about legal rationality and law’s internal operations. Framework law is in Sweden a technique for legislation. It is not possible to give an unambiguous definition of this concept, but one can say that under an overall goal framework law allocates competence and procedures to administrative bodies in order to fulfil this overall goal. Compared to legislation with particular rights or duties for a certain addressee, framework law lacks to some extent a clear substantial content that directly can be executed. One typical characteristic is that framework law often opens with a presentation of goals and guidelines rather than substantive rights, e.g. ‘sustainable development’ or ‘good health for all the people’. In many respects, this type of legal rationality corresponds to Tuber’s concept of substantive law.

Consequently, often framework law also contains extensive rules assigning rights and duties for bodies to supplement, interpret or else give substance to the overall goal. Framework law also contains rules stating how this interpretation should be done. Typically, it is not possible to assess the law unless the law has been applied for some time and to a certain extent. It is often not possible to assess the outcome of the law with traditional legal methods; often are social sciences methods required. We can talk about a deliberate vagueness in the law which will be clarified gradually (still in a different way compared to general clauses). Framework law is thus the often used legal design to invoke substantive and reflexive elements in the law mentioned above.

When analysing framework law, Hydén starts by defining the tasks certain element of a regulation has. This corresponds to Teubner’s internal structures of law. Within a regulation, certain tasks have to be assigned: what will be done, who will act and how. These tasks are accompanied with three different kinds of rules assigning competence, procedure and substance (action). A regulation can be designed very different with respect to these kinds of rules, but it is not possible to configure a law arbitrary considering the composition of these rules, the choices do matter. It should however be pointed out that within method of legal interpretation lies the ability to find the key elements in a regulation, the

elements that are essential for the law to operate at all. Historically, law has been designed differently and hence with different operations and functions. Looking into e.g. traditional contract law, we see a focus on substantive rules addressed to actors in the field and competence to adjudicate lies almost exclusively on courts. Welfare regulations are often configured with focus on programmes where the substantive rules expressing rights and duties are complemented by rules expressing values and rules that balance different interests or set up means-ends. Often are extra legal bodies in the welfare system vested with competence to ‘apply’ the law. The role of the courts is reduced to secure procedure. This historical development is the key issue of Teubner’s different rationalities of law.

The balancing of different interests indicates inter systems conflicts that have to be solved. Since the conflict does not occur within one system, a system specific and system conform rule can not be used or developed. Instead is the balancing of interests a negotiation which often is done by representatives for different interests. In Sweden several boards and special courts with permanent or co-opted representatives for different interests are set up to solve conflicts on the field of labour, consumer market relations, technology etc. Different rationalities often use different techniques when it comes to the legal operations. The formal legal rationality operates mostly with legal syllogisms. When it comes to the application of law, this operation is done ex post. Legal operations working with balancing of interests or means-ends rules operate ex ante. These two different kinds of time perspectives have consequences for the legal rationality.

2.3 Analysis of GMO Regulation

Placing the GMO regulation within the Environmental Code gives it a focus on substantial values like safety, health and environment. The code is at the same time based on other market oriented values like development, free trade etc. The over all goal of the code is to balance these two set of values if they conflict. The code consists of a variety of regulatory means depending of the character of the activity that might be harmful. Basically, these regulatory means are traditional means like permit, reporting, licensing, supervision etc. Few areas or activities are in general forbidden. But it is clear that the EC aims at changing or modifying the conditions and structures of the market in some aspects, especially when it comes to demands for permit like in the GMO case. Instead of forbidding certain activities, the law is proactive and tries to achieve a market solution without externalities.

When it comes to chapter 13 devoted to GMO, it is clear that the structure is about the same as the Code. Even though the need for permit is laid down by law, the decision whether permit is given or not, will be decided by the SBA. The chapter empowers the SBA to decide whether a company or an institution can use its property for scientific testing. Therefore, there is a demand for

17 Today in Sweden almost every field or branch have an ethical committee trying to solve problems emanating from the system and the consumers, caretakers, users and alike. This development might indicate a problem for the law to handle this type of conflicts, se Hoff, D., Varför etiska kommittéer? Diss. Lund, Sociologiska institutionen 2003.
thorough investigation when applying for permit and deciding on an application. One reason for this investigation is of course to avoid negative consequences for the environment. Safety for the environment and other moral and ethical values are of importance. Thus, the code and the GMO regulation would so far to a great extent be characterised as substantive law according to Teubner’s terminology. The legal design is also typical for Swedish substantive law: a framework law guided by some abstract ideals, competence delegated to authorities and means-ends and balancing of interests as legal operators. Risk analysis, scientific investigation, precautionary steps etc. are means to achieve sustainable development and safety.

Almost all of the substantive rules in the chapter concern the permit. One reason for this is that from a formal point of view, the chapter infringes the right to carry out research and it infringes the right to use your property the way you want. Indirectly it is an infringement on your right to operate on the market. Normally, activities carried out within a plant or on a property that cause a loss to someone through injuries or damages, will legally be handled ex post; damages must have occurred. These rights are now limited ex ante through a general demand for permit. The permitting procedure thus means an exercise of public authority but in the field of market relations (not the field of e.g. welfare) and the interest of the rule of law is thus very strong. Unambiguous, predictable rules applied equally are then of great importance. This is probably one reason for the time limit of 90 days. The reason for this infringement is the above mentioned ambition to achieve a sustainable development and that ethical concerns are taken. Another reason is that the consequences of an ‘accident’ with the GMO release might cause damages that can not be handled with market mechanisms. This regulation might thus secure the market as well as limit it.

But changing the conditions of the market requires special legal format, since it entails infringements of civil rights. These aspects of the code and the GMO regulation can be viewed upon in a more ‘formal’ way. Law’s operations need to change from a more programmatic to a more rule oriented operation so that legality and rule of law can be maintained in each and every case.

The EC contains some general rules that point out certain types of actions as criminal. Apart from these more general criminal actions, there are two sections in chapter 13 that are criminal to violate (section eight and eleven). When determining if an activity is harmful to the environment and if it is criminal according to rules in the EC, the procedure follows however criminal procedure; this is also pointed out in the EC. Thus, ordinary courts decide on a crime in the EC and according to those principles that follow in the penal law. Typically, criminal law belongs to the formal rationality of the law.

There is a demand for an ethical justification of the decision. This part suggests that the legal-administrative system is capable of making an ethical assessment of the GMO-technology in general and of the application in particular. There are however no rules at all (whatsoever) guiding the SBA when deciding on this issue. Normally, open ended rules like this are not coupled with a strong legal operator like in our case with the effect that makes it impossible for the SBA to avoid the issue. Furthermore, open ended rules like this are normally complemented by guidelines, further instructions, and rulings from appeal courts and alike. The ordinance 2002:1086 complementing chapter 13 is
void of the ethical aspect. Normally, it is considered as a problem when invoking such an open ended rule in this way within not just a law, but also making it a pivotal part of the licensing procedure. The SBA is really locked up in this sense. One way out is to refer this question to the Gene Technology Advisory Board who has the over all responsibility for the ethical questions. GTAB has however no direct responsibility for the licensing procedure. It is not clear how to understand this ethical aspect of the regulation.

At this level of analysis, we get strong indications of the nature of the regulation’s rationality: the legal design indicated is substantive with some formal elements. What is not clear is whether there are reflexive elements in the regulation. The SBA refers the application to several more institutions and authorities than SBA and SEPA. For a long time seven referrals were used. Apart from the investigation made by the applicant, it is assessed by the SBA, SEPA, GTAB and five more institutions. Moving to this part of the administration, we get other indications of the legal design.

Taking a closer look at these institutions, we see that all of them are experts in the sense that there are people at the organisation or institution that can understand the very complicated issues in an application. On the other hand, several of these referrals are more than an expert organisation: Swedish Farmers and Ecological Farmers represent one or more interests and if nature can be considered to be an interest, Swedish Society for Nature Conservation represents an interest. Except for representing an interest, several of the referrals do in a general sense represent or encompass an ethical standpoint. For instance, the three universities represent a general view on research and ethics.

Thus, it is possible to view the regulation in a more contextual, open manner. We then see that there are possibilities for the deciding body to incorporate several other views on ethics, but also a possibility to the SBA to free itself from this question. It is stipulated that the SBA shall consult GTAB and SEPA, but the decision to consult other institutions and organisations is a policy decision made by SBA. Looking further into this referring part of the regulation, it is important to describe what the Gene Technology Advisory Board does. The board is composed by seven members of the parliament, seven experts and one chairman with judicial competence. Besides “consulting” on referred applications, the board arranges hearings, conferences and alike. It also produces minutes from conferences and hearings, reports and investigations. To some extent there is public discussion initiated by the board, even though much of the discussion is directed to the actors in the field. Participants from the industry, science, experts, and administrations are participating in the discussions and hearings. This means that it is possible to see elements of reflexive law in the regulation, especially since the GTAB is set up to somehow balance politics, technology and ethics. It is thus likely that there is an ethical discourse within this part of the regulation.

Having reached a conclusion so far, some last remarks should be made. There are formal aspects of the law, there are substantive elements of the law and there are reflexive elements of the law. What should be noted is that the legal modus operandi for the SBA are single applications. This means that the procedure focuses on this one application and the over all structure of the procedure must subordinate to the demands of this decision. One such demand is that comments,
objections, assessments etc. must be made with reference to the application in question. Another demand is the time frame, which is set to 90 days. Considering the dynamics of an application, the time to reflect on an application appears not to be very long. The discussions due to an application in the context of GTAB seem however to be of another kind; opinions on a single case cause broader and deeper discussions on principles. The application and the decision somewhat serves as a centre around which further, broader discussions can take place. This is of course a different design compared to e.g. using hearings on general aspects. What is important is the stress to make a decision that the single case procedure entails. A discussion around a question in general is often different compared to the discussion under legal statues and with the demand to judge and verdict the case.

So far it is possible to give an account for the legal rationalities of the Swedish GMO-regulation. It is primarily substantive but with reflexive and formal elements in it. We can thus talk about a legal hybrid when it comes to legal rationalities. According to the matrix, some of the aspects do not work together and we can - prima facie - expect normative conflicts when such a regulation is operating. Will the fact that there are several rationalities within one regulation result in a conflict that has to be solved, or can these rationalities exist side by side? If there is a normative conflict, according to what kind of meta-rationality will it be solved?

2.4 Inclusion and Exclusion

Having presented the Swedish GMO-regulation and analysed its legal design on a formal level, the next step is to account for how the law operates with respect to the participatory aspects. The main purpose is to answer the question how the law attempts to solve the inherent normative conflict of the GMO-regulation. The data that will be used comes from the PARADYS project. Data from the licensing procedure on GMO was analysed with methods of conversation analyses in order to describe the impact of participatory decision-making on the construction of citizenship.

The Swedish data showed that there were two kinds of citizenship: one which was centred around the legal procedure and hence was labelled the “procedural” citizenship, and one “public” citizenship, which was centred around a Greenpeace campaign. The two citizenships were a result from including and excluding dynamics between social positions within the decision-making procedure. In the following, a brief account of those social positions and their dynamics will be presented. The presentation is alphabetical.

Activist is the position that resulted from the communication around the Greenpeace activity. The position is strategically in the sense that it is meant to initiate debate and further communication. Greenpeace who is the only actor taking this position, takes the position Environmentalist later during the course of events.

Administrator is the position that is centred around the application procedure. As with Activist, there is only actor taking this position, the SBA. The position is, not surprisingly, centred around procedures, decisions, bureaucracy etc.

Applicant is the position taken by the applying company, also the only actor. It is centred around technology, economy etc.
Debating company is a position found in relation to the activities Greenpeace took in order to initiate public debate on GMO. This position is in many aspects like Applicant, but still different since the audience is very different; communication with Administrator is different then with Activist/General public.

Environmentalist is the position that was based much on the substance of the communication, i.e. environmental values shape the social position. This position is taken by several actors at different occasions.

Expert is the position expressing knowledge and making scientific claims. It is taken by several actors.

Informing company is, like Debating company, a position close to Applicant, but still different due to its focus on a local public and due to its dynamics with Administrator.

Judge is the position taken by SBA and all referrals. It is much about judgments and normative communication and might be seen as corresponding to the more ‘legal’ part of the legal-administrative complex.

General public is accounted for as a category, but not as social position, mainly because it is not a social category in our data. It is however part of many social positions, as a relevant actor without being an actor. But the General public can of course be viewed upon as the totality of citizens, ‘people’ in general or alike.

3 Social Positions’ Relations to the GMO Regulation

It is obvious that many of the social positions found in the Swedish data have connections to the legal administrative context - direct or indirect. This is not surprising since the data is made up by an application to the SBA and material relating to and resulting from this application. The purpose now is to look closer into the positions and their dynamics in order to see if the different rationalities accounted for in the previous chapter result in certain social position and certain dynamics. Now I will account for the positions from the three different rationalities, beginning with the more formal parts, via the substantive elements to the reflexive parts.

The fact that the GMO issue is regulated by law and not solved within other subsystems and that competence is vested in SBA to administrate the issue, have obvious bearings on the position Administrator; it is a direct result from the regulation. This position is however not entirely ‘legally’ defined, rather bureaucratic which of course is part of the law. So, the position Administrator fits with the legal domain we are dealing with. Probably, the social position resulting from criminal or civil procedure would be different than this one. Administrator could not possibly be very different from the one we found in our material; the exercise of public authority must be communicated in certain way to be legal as well as legitimate.

The position Judge is the position that is most direct related to the formal legal operations. Every referral except for GTAB and SEPA is free to argue in what way they choose. The letters of missive that follows an application does however normally ask for risk identification, ethical considerations are never asked for (confirmed with an SBA official). Furthermore, when a referral
refrains from communicating the analysis in a legal mode (approval or not approval), SBA asks the referral to communicate legally-binary. For SBA this means that communicating with reference to the values that are incorporated in the regulation is not enough, they also have to be juridified, even outside the administrative borders, yet within the legal system in communicative terms. It is possible to interpret the reasons for this position and the dynamics in different ways. One way is to understand it as the opening of the law to a broader part of society. This is typical for framework law and often semi officials take part in shaping the law. The professional limits of law are transgressed, and the price for this is the juridification of the communication. Another interpretation, actually the other side of this coin, is the reduction of complexity. The regulation have opened the legal decision to certain values additional to the ones that dominate market relations and also opened the law to almost any value due to the demand for ethical justification. The environmentally significant values and the possible other significant values connected to the ethical demand might open the decision to almost any argument especially since there are few guidelines of how to balance all these values. Securing the autonomy of the legal system is done by stressing the normative aspect of the decision, especially since there has to be a decision of the case in question. This juridification of the communication is probably done with reference to the demand for legality and some sort of rule of law in relation to the applicant.

The position Applicant is to some extent a direct result by the dynamics with the legal system. Due to the regulation, it is necessary for a company or an institution to adhere to the legal communication both with reference to the legal requirements and the legal communication. Applicant’s argumentation must not just present the facts and risk assessment, but also an assumed claim that the activity also is legally permissible. As have been mentioned before, adhering to the legal requirements (both in the regulation and the conditions in the permit) and the legal communication gives a permit that also excludes future claims. The point here is that the requirements are not just fulfilled, they are also legally defined. The position Informing company can be understood in the same way.

The position Expert is related to the legally requirements based on the environmental character of the regulation. Since one purpose with the regulation is to assess the environmental consequences of certain projects, knowledge on facts as well as relations in nature is crucial. To be admitted in the communication presupposes knowledge about these facts and relations. Other ‘opinions’ have to be communicated in other ways. The only part of the regulation that might open up or presuppose other kinds of knowledge is the ethical justification. This is a difference between system knowledge and common sense knowledge. It thus clear that the kind of communications that make up Expert is directly related to the substantive elements of the regulation.

The position Environmentalist is also a direct result of the substantive elements in the law. The main difference between Expert and Environmentalist is the over all evaluation of existing expert knowledge and the evaluation of what normative standpoint lack of knowledge mean, like the precautionary principle.

The position Activist is not really effected by the regulation since it is communicated outside the administration of the case; in fact, this is the purpose
with the communicative format of the position. Discussions with representatives for Greenpeace confirm the view that being inside the “system” also means communicating differently and achieving different goals. This is also confirmed by the fact that Greenpeace takes the position Environmentalist later on. This is probably done in order to initiate communication that allows legitimate argumentation from Greenpeace’s point of view. Nor is Debating company related to the regulation in particular. But the image of self is legality which is interpreted as a general difference between illegal activists and legal, i.e. legitimate, companies just obeying the law.

3.1 Conclusion
The general picture from the PARADYS study was that there are two types of citizenship - one procedural and one public - and the mediating social position between the two is Environmentalist. A closer look to the data reveals that certain social positions are connected to certain legal rationalities, as described above. Arranging the legal rationalities from formal rationality, via substantial rationality to reflexive rationality, results in a certain order where those social positions that are at the centre for the legal decision are also ‘close’ to the formal rationality and those social positions that are not at the centre for the legal decision are close to the reflexive rationality. In between falls the social position Environmentalist and the substantial rationality. There is a clear selection of social positions that is a result of the legal rationalities. Put simply, those social positions ‘necessary’ for the legal decision are included, while those social positions not ‘necessary’ for the decision are excluded.

Since there is an evident selective effect, there is also a strong indication of how the normative conflict is solved. It seems as there is a prioritization between the different rationalities. The subsequent question is why the law solves the normative conflict in this way; is there a meta-rationality that guides such a normative conflict?

4 Analysis
If we look at the Swedish GMO-regulation, there are several aspects that point to participatory ambitions. One is that there is an extensive consultation process including not only experts and interests, but also a special body (GTAB) which have the sole task of initiating and housing discussions on the gene technology. Another aspect of the participation is the demand for ethical justification. If we assume that experts handle system specific questions, the demand for ethical justification - in each case - would rather belong to a Habermasian lifeworld. In our social positions, we can see that to some extent can Environmentalist encompass ethical standpoints. But if we take the ethical demands in the regulation seriously, everyone can argue for or against an application with very different arguments. In that sense is this legal rule very special and it is probably the only one in the Swedish legal system.

According to the law, the applications for a permit could result in very interesting and broad discussions among many different people. Today there is also a possibility to comment on applications along the procedure through the
SBA web page. But the result shown so far does not meet this potential. If we look into the more than 100 decisions made by the SBA concerning GMO applications, some further conclusions can be made. First, the ethical part of the law was brought up in the decisions (it had to be, due to its strong position in the chapter), but for a long time the SBA used the same formula just stating that the “activity is ethically justifiable”. Compared to the amount of the risk assessment accounted for on several pages, SBA did not discuss the ethical part of the permit at all. So, the participatory mechanism that comes with the demand for ethical justification did not have that kind of effect. But how is it possible for the legal system to evade these potentially participatory mechanisms, and for what reason?

It is clear that the law prioritises the formal rationality of law when it comes to the part where a decision has to be made. If we focus on the time element in the process, the application procedure starts from a formal law level, moves to a more substantive level and then comes back to the formal level. The procedure is initiated by the applicant; without an application, the SBA would not act, probably nor the GTAB. The application is very often complemented after a initial revue by the SBA. The application is matched with the formal requirements of the law and in the ordinance 2002:1086 there are numerous detailed prescription on what an application must include. The initial process is thus a matter between the applicant and the SBA. After this, the SBA sends out a suggestion for consultations. The last step is the “actual” decision, when the SBA has to consider all relevant information and subsume it under the formal requirements of the law. This last step is a matter for the SBA alone.

The procedure starts from a demand for permit, which is a way to anticipate possible future claims on the applicant. The procedure ends with a decision whether the applicant can use the property for the purpose of deliberate release of GMO. In between lies the process where the initial possible future claim has to be analysed. The consultation process serves the purpose of anticipating future damages and thus future claims, be that of civil or criminal character. This process is very thorough since a permit almost totally precludes future claims. The licensing procedure can thus be view upon as a substitute for an otherwise civil matter. The ethical demands do however not fit in to this logic.

When the ‘actual’ formal decision is made, it has to be legitimate from different points of view. According to Teubner different rationalities justify themselves differently.\(^\text{18}\) Formal law is justified through the establishment and reproduction of the market, i.e. private autonomy. Substantive law is justified through the compensation of the market inadequacies. Reflexive law is justified through coordination of social coordination. This means that there are demands for legitimacy on the regulation in general, but also on the decision in particular. When looking into these decisions, there are strong indications that the SBA is becoming more and more aware of this problem. The decisions are normally quite extensive when it comes to the procedural aspects. The legal requirements are accounted for, the consultation process is accounted for, the precautionary means are accounted for and the way SBA has decided is accounted for. A

\(^{18}\) Teubner at note 15, p. 257.
relatively small part of the decision concerns the technical aspects. The decision is thus communicatively oriented to the general public or the political system; substantive and procedural legitimacy is fulfilled.

But how is the legitimacy of the formal aspects of the law fulfilled? The answer to this question lies in SBA’s ‘choice’ not to use all the participatory potential in the regulation, the selective effects. This choice is also a way to solve the ‘conflict’ between different rationalities in the regulation. It is even possible to look upon the regulation as a ‘protection’ against legitimate critique from anyone. This is the case when comments on the cases through the SBA home page are considered to be of general interest and thus left aside. To comment on a specific case requires definitely expert knowledge. Another example concerns the ethical justification, already mentioned above. One official at the SBA confirms that the missive is very short and does not explicitly ask for opinions on the ethical issues.

Different forms of legitimacy of the procedure, a procedure that is after all regarded as a civil matter, and - as will be discussed further - coherence of the legal system are matters that direct the analysis to the legal system. This requires an opening of the black box that law often is viewed upon.

4.1 Opening the Black Box
Kaarlo Tuori has presented a theory of modern law that in its first appearance is titled Towards a multi-layered view on modern law.19 According to the author, the theory deals with the nature of modern, positive law, its legitimacy and its limits. The two main strands in this field he is trying to overcome are the Kelsian ‘grundnorm’ and Harts rule of recognition. What Tuori is trying to do is to find a realm of legitimacy that is ‘beyond’ positive law but still not located within different natural law theories. Of importance here is primarily not this perspective, but rather how to understand the scope of law and the internal conditions of law and thus laws external functions and effects; a theory that can help us understand the selective effects of law and the meta rationality that solves normative conflicts within a regulation like the one on GMO.

Tuori proposes that law consists of three layers: the surface level of law, the legal culture and the deep structure of law. The surface level of law consists of legal regulations like individual statutes or decrees, court decisions in individual cases and legal dogmatically works. This level is characterised by Tuori as an “ongoing discussion where the legislator, the judges and the legal scholars all make their interventions”20. The legal culture is as a level an expert culture with a certain autonomy differentiated from a general legal culture of ordinary citizens. This expert legal culture consists of substantial general doctrines of different fields of law, composed by general principles and basic concepts. Here we also find patterns of argumentations, norms about interpretation and norms about how to solve norm conflicts. These doctrines and ‘meta norms’ are not to be found in statute books. The last level, the deep structure, is the most inert

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20 Tuori 1997 at p. 433.
level dividing legal history into epochs (traditional law, modern law, liberal law, social law etc.). Here we also find the basic type of rationality manifested by the law, for instance Weber’s formal rationality. Here Tuori also places the fundamental normative principles of the given type of law, e.g. basic rights and principles of the rule of law or Rechtstaat.

Thereafter, Tuori proposes six types of relations between these levels.

Sedimentation is the relation between legal practices on the surface level and the legal culture and the deep structure. Human rights is one example that through the different constitutional assemblies along the years together with legal dogmatics, theorists and philosophers have sedimented into the foundation of modern law. Constitution is the ‘bottom up-relations’ between the deep structure, the legal culture and the surface level. According to Tuori, these relations “supply the necessary conceptual, normative and methodological tools without it would be impossible for the legislator to legislate, for the judge to judge or for the legal scholar to arrive at their norm and interpretation standpoints”\(^{21}\). The surface level then ‘pays back’ to the deeper levels with concretisation, which is the third relation. At the same time as the deeper levels constitute the surface level, there is also a matter of limitation. Decisions can not be taken without the deeper levels, but nor beyond these levels. For instance, new laws have to be interpreted by judges and legal scholars. The purposive rational way in which modern law is enacted, has to be filtered through practices obeying a different logic. This process does not restrict itself to formal aspects, but Tuori even talks about a “normative censorship”.\(^{22}\) The last two relations - criticism and justification - concerns the more theoretical aspects of Tuori’s theory, that of law’s legitimacy.

The normative conflict described as a conflict between different, competing legal rationalities will now be interpreted from this theory of the legal system’s internal organisation. Teubner’s legal rationalities are induced historically. This means that formal rationality precedes substantial rationality which in turn precedes reflexive rationality. According to Tuori, such a development would result in strong sedimentation and constitution processes between different layers, preferably the legal culture and the deep structure. Put simply, substantial rationality have to, if possible, fit in to the normative structure of the formal rationality and reflexive rationality have to fit in to the normative structure of the former two. This is a matter of internal coherence of the legal system. These processes are however complex and different “solutions” for how to arrange such sedimentation and constitution arise. For instance, Karl Renner have pointed to the ability for legal institutions to change functions over time.\(^{23}\) And surely, different legal rationalities can exist side by side inasmuch as the sedimentation and constitution processes have taken place. But, as we can see in the GMO-regulation, sometimes normative conflicts still arise.

The GMO-regulation is a balance between different values including the ones

\(^{21}\) Tuori ibid at p. 438.

\(^{22}\) Tuori ibid at p. 440.

typical for the market, private autonomy, free trade etc. This part of the law is not just the oldest one, but has also deep roots in the legal system in general. A political instrumental regulation of the market will thus always be carefully judged against this part of the law. Those market principles that are effected are deeply rooted in the law and exist regardless of positive law; they exist in the legal culture and the deep structure of law. According to Tuori’s theory, principles of sustainable development and other substantial values will always be balanced against these parts of the law regardless of the normative content in the positive law. The Environmental Code provides for the solution of such a conflict (the first chapter) and this way the potential conflict between different values can be normatively solved - there is a balance formula.

Although the law often is conceived of as a system for justice, modern law does not handle ethical discourses. Demands for ethical justification in a broad sense are therefore not compatible with the law. The last years the SBA has tried to relate to the ethical demands in the decisions, but they are always interpreted as belonging to the formal rationality, i.e. as being a matter of efficiency of the market. There is thus a substantive problem for the legal system involved with this kind of regulations, and an interpretation of the regulation is made in order to avoid a normative conflict. Tuori stresses the point that there is a normative constitution, i.e. the legal culture and the deep structure of the law “provide the principles which form the normative basis for new laws”.

Another aspect of the legal system is the modus operandi of the law. The central parts of the law are very much built upon an idea if two parties having a conflict, the two-party axiom. This axiom is most likely based on a millennium long standardisation of typical conflicts. This axiom serves as a model for many other relations: creditor - debtor, buyer - seller, landlord - tenant, plaintiff - respondent etc. Even when many actors are involved, like in company law, the law uses singular phenomena, e.g. the idea of a ‘shareholder’. This two-party axiom is also used when solving conflicts. The conflict solving triad is based on these two parties and an independent judge, mediator, arbitrator and alike. (Shapiro 1981). I would say that this modus operandi belongs to the deep structure of law and that parts of the reflexive rationality constitute a normative conflict to this normative structure.

The GMO-regulation opens up for a rather vague definition of who can present arguments for or against an application, especially when it comes to the possibility to comment on the application through the SBA web page. This entrance into the procedure is even more important since the procedure is still open, the case has not been decided. What is of great importance is that the law itself decides whether someone has the right to make a legal claim. It is thus a decisive question whether you have a right to ‘express yourself’ according to different participatory regulations, or the right to make a legal claim according to

24 Swedish law had no principle of ownership protected in the constitution until some ten years ago. This fact did however not mean that the principle of ownership did not exist; this civil right was protected by the courts.

25 Tuori ibid at p. 439.

26 See e.g. Shapiro, M., Courts : a comparative and political analysis. Chicago: U.P. 1981.
the deep structure of law. The difference is fundamental.

The law needs to be able to distinguish between any claim and a legal claim because of the subsequent problems with for instance the legal force of the decisions. What a decision comprises from a legal point of view is very important and who can appeal a decision is also of great importance. The need for an entrepreneur or anyone who want to make an investment or anyone who want to invest resources in general to know who has the possibility to take legal action is fundamental; it is a question about the ‘rules of the game’. If you as a neighbour did ‘express your self’ on the SBA homepage about an application from an ethical standpoint, did this also mean that the you have exhausted your right to take legal action in the case? This principle is called “res judicata”, and is a principle that precludes further legal claims. The circle of those who can take legal action have to be strictly controlled by the legal system.

Another important aspect for a legal actor is the right to have your case decided which stresses the law to make a decision even though there is not knowledge enough. The law can not refrain from decide on a legally valid claim. Here a strong principle is that if an action is not considered illegal, it is legal. The right to assert such a claim in a court is guaranteed in article 6 of the Convention for the Protection of Human Rights and Fundamental Freedoms. The right to have your application tried within 90 days emanates from this principle. The consultation can therefore not last for a too long time. The interest to have the case decided is strong, perhaps more strong than the interest to include any argument in the decision process.

4.2 Concluding Remarks

From a participatory point of view, the legal system is a very selective system. Being a party of a conflict, the law provides for many including mechanisms. Everyone have the right to present his or her case in a trial where certain procedures should guarantee your civil rights. There is a right to trial, a right to bring in evidence, a right to argue, often a right to bring legal expertise etc. The trial should the guarantee you a “fair” trial. This means that every argument should be listen to and considered. This means that the legal system is inclusive. At the same time can not everyone have access to the legal system. The norms setting up limits for participation are important for the law since this exclusion is a prerequisite for the inclusion. A “high” level of inclusion necessary means exclusion.

Having analysed this case, is seems clear that the law solves the normative conflict of the substantive rationality easier than the normative conflict of the reflexive rationality. Proposed here is that the participatory elements of the regulation are less coherent with the deep structure of the law than the substantive elements. Probably this potential normative conflict will be solved by the legal system by an ever more strong selection.