

WP5: Two technologies

Value dilemmas

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1. Introduction

For this phase of the project, WP5 addressed value dilemmas from the two technology areas chosen as exemplars for the project (biometrics and dual use issues in pathogen research). We framed our analysis as part of the broader question of value inclusion in the post-Lisbon Union. In this context, we did not only aim at a deeper analysis of both case areas, but also addressed issues of EU-competence, since we think that this is very important as a foundation to which values can be engaged within the work of the EU – and therefore influential upon our stage three.

We elaborated the values in question by identifying more explicitly the value themes that run through the case examples. In the third and final part of the project we will bring together a synthesis of the different approaches to the cases and dilemmas that the other work packages have uncovered. We already moved onto this part of the work, and therefore this report does not only reflect the issue of value dilemmas (a subject that was also, albeit somewhat prematurely addressed in deliverable 1) but also the potential of a value-based approach to governance in a more general fashion.

A crucial difference between biometrics and dual use is that biometrics is claimed to be well-regulated whilst dual use is claimed not to be. At the basis of this distinction lies the fact that biometrics is quite well-defined, but dual use has many different definitions. For deliverable 1, we took a broad approach to dual use, addressing the problem of semantic erosion. With regard to biometrics, we focused on the obvious tension area between privacy and security. In the one case area (biometrics), it is clear which values are contested, in the other (dual use) it isn't even clear which values are at stake. In this report, we address both issues with a more in-depth analysis of what is at stake as well as of what the preconditions, hidden assumptions and implicit values in both case areas are. With regard to this deeper analysis of the case areas, it has been necessary to restrict ourselves to only some aspects of the societal issues involved, since both areas are too broad to deliver an exhaustive overview. We sketched out the main lines in current debates on the basis of a broad literature survey, focusing on the

interconnection between relevant values and in depth philosophical analysis of the concepts that are central in both areas.

2. Value dilemmas in dual use of pathogens and in biometrics technologies

2.a. Introduction

Biometrics technologies and dual-use dilemmas with regard to pathogen research remain issues of considerable social concern both in Europe and nationally and internationally; the issue of terrorism lingers in the background of both technology areas addressed. Both case areas include privacy, autonomy, public interest, personal and national security, freedom of publication etc. Biosecurity is perceived to be a critical policy area for this day and age. In this second deliverable it is necessary to follow up on the tense discussions on this subject and analyse whether and on which levels there may have been an implicit overstatement of the problem. This also calls for an in-depth analysis of how the problem has come to be framed, why, and what alternatives we may have at our disposal.

European governance of science and technology as it currently exists is not value-free, but it is, arguably, based on a limited notion of values of a limited group. Currently, the debate on terrorism is very much framed in dualistic terms. With regard to the issue of terrorism, it appears quite evident where 'good and evil' lie, but the perception of who is a terrorist, and who is not is in part a matter of definition and perspective. At the basis of the problem of terrorism lies a question of who is invited to the negotiation table. Without posing the question of justification, one needs to ask why a specific group radicalises. Often, this step stems as much from frustration as from the influence of ideologies condoning violence.(Borum forthcoming; Ganor 2002; Hudson 1999; Kennedy 1999)

There is an area prior to the division in good and evil, black and white, where dialogue is still an option. It is as important to assess the causes of current terrorist threats as it is to counter its effects if one wants to discern where this turning point lies, and whether negotiation may anew become an option. This also means that we may need to abandon simple dualistic

thinking in terms of 'us' and 'the others'. The lessons learnt from, for example, the IRA, the PLO and the ETA show that there are points where dialogue can, although difficult, be reinstated. But in current policy making, we already appear to take a normative stance and decide which values should be on the table and which values shouldn't. This in itself may lead marginalised (or excluded) groups to radicalise. Prior to that choice, we have to ask, whose values are the guiding values, should they be the guiding values, if not, which ones should be taken into account. This necessitates a broad perspective that extends over the borders of the current EU.

Dual use issues are of a different nature from issues of biometrics, but both share a common problem area in their implicit addressing of the issue of restricting personal autonomy in the name of security. In the case of dual use, the restriction concerns scientists' freedom of research, as well as access to and publication of research, in the second it concerns freedom of movement of individual citizens.

2.b. Dual use issues in pathogen research

Dual Use, as a concept in itself is ill-defined, and it is unclear which values pertain to the issue as a result. Before the terrorist attacks of 9-11 2001, the concept of dual-use referred to the potential of a technology for both military and non-military uses, medical uses in particular. At first, it meant to refer to the use technologies that were developed for non-military uses for military purposes, but the term came to refer to the reverse shift of function as well (Molas-Gallart 1997). At this stage, the issue was the intended use of a technology, and the problem of it being used for purposes the original developers did not have in mind and would not have supported. Therefore, the moral issue that it referred to was how the values of a researcher, a research group or a specific discipline were affected by such a shift in use. The debate did not necessarily extend to the issue of whether and when military uses of technologies were justified or not. After 9-11, dual use became associated with the dilemma that scientific research has the potential

to be used for bad as well as good (Selgelid 2009; Pustovit, and Williams. 2010), therefore introducing a moral dimension that extended beyond the values of a researcher, a research group or those embedded in a specific discipline. Dual use became a central issue in humanities research (van der Bruggen 2011). A further shift in meaning of the term dual use was its association with bioterrorism.

All the abovementioned shifts in meaning went gradually, and without much in depth discussion on the subject at hand. Furthermore, the specific definition used for the concept of dual use differs from continent to continent. A further complicating issue is the fact that researchers confusingly use these different definitions of dual use pell-mell, and often without clear specification of which definition they intend. The anxieties and societal fears about dual use issues therefore also remain rather undifferentiated and intuitive. This however also goes for experts in the field. Whilst billions are spent to counter bioterrorism and the issue of the terrorist threat potential of novel technologies is debated at public health conferences, lists of health challenges and government advisories, there are only a very marginal amount of cases of bioterrorism, the nature of which was often not even lethal (Hillel et al. 2005).

As far as the events of September 11, shifted the definition of dual use to bioterrorism, an international concern was raised on the global humanitarian and environmental consequences of possible misuse or malintended use of biotechnologies. In the past decade, the perception of a bioterrorist threat increased and this demands life scientists to consider the potential security implications of their research (Kuhlau 2008). This global problem seems to demand local response is demanded of national governments and individual scientific research groups (Simms 2004). This led to the difficult question about who 'owns' the problem, and who is to take responsibility to prevent misuse. Currently, the subject of dual use is debated on an international level by parties such as the World Health Organisation, NATO and other military organizations working on terrorism and civil bodies such as the sunshine project or the G8 group. International regulatory tools used are International

Health Regulations the Biological Weapons Convention (BWC), and the United Nations Security Council Resolution (UNSCR). On a national level, funding agencies, research groups (universities, industry and military), health sectors, and the media play a key role in the implementation of these issues. Several strategies are proposed: a focus on international agreements; a focus on stricter national and international legislation on freedom of publication; stricter regulation on access to potentially harmful research (for example by excluding researchers from countries that are known to harbor or yield terrorists); voluntary standards for research groups on self-restriction in publication of research results.

Ehni (2008) defends that scientists only have a responsibility to avoid complicity in the sense of a weak indirect causality, that their ethical responsibility does not go much further, but the scientists have the most direct access to the science and technology in question, and they can respond much more effectively to a potential threat. Voluntary standards seem to be a way to control many emerging and potentially dangerous technologies. They would protect academic liberty and demonstrate that liberty also goes with responsible researcher-ship (Keuleyan 2010). But due to technological progress, scientific research is becoming more easily accessible due to the potential of internet and other 'new' communication technologies. Although there is a problem in the extent to which voluntary self-regulation can resolve the issue of dual use, traditional government controls and treaties are increasingly less effective in regulating research practices (Maurer & Fischer 2010). Containment of information has become very dependent of individual research groups, it cannot easily be enforced in a top down fashion. Still, this also means that security becomes very much dependent of the goodwill of such individual research groups. National and international legislation may aid in creating a stronger structure for such voluntary self-regulation. The moral obligations demanded from life scientists may include the obligations to prevent bioterrorism; to engage in response activities; to consider negative implications of research; not to publish or share sensitive information; to oversee and limit access to dangerous material; and to report activities of concern (Kuhlau 2008).

Although bioterrorism might be perceived as an imminent threat, it may be beyond the capacity and therefore beyond the responsibility of life scientists either to prevent or to respond effectively (Kuhlau 2008). One cannot go much further than ask of researchers to take it on as a moral obligation to consider potential negative implications of their research, but seen the fact that the outcome, potential application and development trajectory of their scientific research can often not be predicted or premeditated, the effectiveness of such a moral obligation is limited. One cannot go much further than asking for due consideration potential negative implications of a scientist's research, make protect access to sensitive material, technology and knowledge, mandatory and ask scientists to report activities that are perceived to be of concern. Seen the fact that this latter one may demand of researchers to enter into conflicts of loyalty, reporting of activities of concern may hold negative implications for the researcher in question, therefore decreasing the inclination to actually follow up on such matters of concern. Scientific responsibility is therefore restricted to obligations concerned with preventing foreseeable and highly probable harm, whilst unforeseeable, unpredictable and unlikely harms are not taken into consideration.

A clear example of a foreseeable harm is the infamous publication of the sequence of the 1918 flu virus in *Nature* and the reconstruction of the virus in *Science* (von Bubnoff 2005). Although viewed as a landmark by many virologists and although potentially contributing to finding a cure or prevention for a possible future flue pandemic, the publication of these findings raised concern in both the public and the scientific world that terrorists might recreate the virus to create rather than prevent a new flue pandemic. It is logical that the idea of resurrecting a deadly virus raises the public's concerns since although researchers may want to use such research for beneficial purposes, both the resurrected virus and the knowledge used for such a resurrection may hold harmful consequences, in the first case due to a problem with precaution, in the second due to a combination of a problem with precaution and issues of dual use. The case is a paradigmatic illustration of how little the government can do to keep information that

poses a biosecurity threat from getting public knowledge. This is what we should have learned from the smallpox virus research (Tucker 2006). Policies need to be drawn up, the oversight process should be well-designed, and implications for the international governance of dual-use research should be clear. The event gave rise to an agreement between editors from top scientific journals to scan submitted papers for information that might yield misuse of scientific knowledge (Nature 421, 774; 2003). The problem is that much research that may yield potential misuse is not that easily identifiable as dual use research.

Innovation in the bio-medical sciences come under an increasingly rapid pace. This calls for an adaptive pluralist approach. Expertise is ever changing as disciplinary boundaries are being torn down and rebuilt in unexpected and unpredictable ways. Knowledge is no longer the expertise of one individual researcher, not even of one discipline, but of a multifaceted range of disciplines. Issues of dual use are therefore necessarily connected to issues of multi-disciplinarity. Relevant disciplines include microbiology, virology, molecular genetics, immunology, infectious diseases, immunology, nano-technology, veterinary medicine, but also specialists in agri, nutri and aqua). Tackling dual use issues means that it is necessary to involve specialists in security, legislation, risks assessment, psychology and mass psychology etc (Keuleyan 2010). It would also demand an involvement of different stake- and shareholder groups in society. It would entail a cooperation between scientific professional, civil, military and humanitarian organizations.

There are problems in approaching issues of dual use solely through the glasses of bioterrorism. With such glasses, the issues at hand seem easily identifiable, the groups that may aim for misuse of scientific research however remain an 'invisible enemy' and an important dimension of the problem is left out of consideration: the fear of terrorism has narrowed the issue of intended versus unintended use to only one topic. The perceived threat of bioterrorism is very much a result of the fear and concerns that the idea generates (Kittelsen 2009). This fear is not based on true impending

danger but rather on the subjective intuition of vulnerability that has been fed by media anxieties after 9–11, and by the perceived uncontainability, unpredictability, unidentifiability and uncontrollability of such bioterrorist threats (Kittelsen 2009). It is also very much the result of the nature of the threat, it draws from society's deeply rooted fears for biotechnology as such, and the ensuing sense of vulnerability of our biology. Perceptions of threat are increasingly interacting with complex security measures, leading to a dialectic escalation of threat—perception and defense—response that have little to do with actual threats and may even create the threat these structures are meant to counter due to the increasing emphasis that is put on the issue as such: putting it in somewhat exaggerated words: whilst terrorists may have been satisfied with the occasional Molotov cocktail, they may now learn from the debate.

The debate on dual use needs to be brought back to the ground. If one disentangles the definition of dual use from the issue of bioterrorism, one also deconstructs part of the emotive charge of the debate. This has the benefit that one can more easily look at the subject from a bird's eye perspective, and analyse more easily which values, interests and world views are at play. Pustovit and Williams list six criteria for good governance of dual use dilemma's (2010):

- (1) the importance of a moral “measure”, and ethical norms and standards in human life (e.g. Good clinical practice, Good laboratory practice, Good manufacturing practice in biomedicine);
- (2) emphasis on such notions as human “intentionality” and “values”;
- (3) approaches to the humanization of technologies;
- (4) the development of a bioethical outlook;
- (5) the consideration of the goals of technologies with the aim of bringing simplicity to their use and the benefits they bring;
- (6) the contemplation of achieving the best scenario (the future development of the science of risk).

A very important dimension however would be missed if an approach to dual use did not address the issue of marginalised groups. After all, it is there that the problem of terrorism starts in the first place: from this perspective, it is no longer clear who are the 'good guys' and who are the 'bad guys'. Western military use of technologies may well be perceived of as 'terrorist' by other groups or in other parts of the world. The true issue is whether and to what extent scientific progress and technology innovation should be steered and controlled, and what instruments we have at our disposal to do so.

2.c. Biometrics technologies

We live in an environment that has come to be intricately mediated by technology. In that sense, the human ecosystem has, as F. Brom (Rathenau Institute, the Netherlands) or P. Kockelkoren (Twente University, the Netherlands) termed it, become a technotope. There are no refuges left in our environment that are completely free of technological intervention or mediation. This omnipresence of technology provides us with many benefits: it provides for information on where one is and what roads one needs to take to get where one wants to be, it provides for the opportunity to remain in communication with our colleagues, friends and family at any given place or time, it facilitates the use of private and public transport, etc. Still, where individuals no longer feel comfortable with certain aspects of this pervasive presence of technology in daily life, the question forces itself to the foreground whether we as citizens are indeed as at home in this environment as we have come to think. At that stage, the technology-mediated net we are constantly embedded in, through mobile internet, mobile phones, public transport cards, TomTom-systems or surveillance cameras and the like, becomes a web in which we may feel ensnared rather than one through which we feel enabled. Specifically the issue of privacy gives cause to such feelings of entrapment, and therefore to wide public or societal concern.

In the past, biometrics technologies were mostly applied to criminal investigation. One of the first of such application of biometrics was fingerprinting, and its use dates back to 14th century China (although in Europe their use was not discovered until the 19th century) (Liberatore 2007). Currently, they are presented as a means to tackle a much wider range of recent and less recent social problems by 'protecting and managing the uniqueness of identity' (Ajana 2010). Social problems that are expected to be countered by a range of biometrics technologies include identity theft and fraud, crime and terrorism, illegal work and employment, the efficient governance of asylum, immigration and social welfare (Ajana 2010). These uses of biometrics technologies seem to pose problems as well as solutions. This is due to their impact on our notions of individual identity: the identity we choose to attribute to ourselves is cross-cut by different technological notions of our identity that may stand in stark contrast and even come into conflict with our own 'sense of self'.

The notion of a 'core identity' to which only the subject itself has some kind of privileged access is outdated. Specifically with the advent of postmodernism, philosophy said its farewell to such a notion, replacing it with a notion of [plural or multiple identities that somehow overlap. From such a perspective it may seem that being exposed in one's capacity of traveler not necessarily exposed the whole of someone's identity. Still, we all have something to hide. Without the ability to hide parts of our identity to the outside world, we become transparent for that outside world, (Mordini 2008). And without the ability to hide, we loose our ability to have sense of Self.

The introduction and spread of biometrics technologies is often regarded as a trade-off between privacy and security, but it is important to see whether and why such a trade-off is indeed being made, and whether it is a necessary trade-off (Liberatore 2007). In this role, biometrics is a prime example of the role of scientific expertise in the complex relation between security and democracy (Liberatore 2007). What is striking with regard to biometrics, is that the implementation of different instruments identify individuals has

went without democratic scrutiny: public support went as self-evident seen the fact that their introduction was motivated as one of the more sophisticated means to counter possible terrorist threat. Fear and xenophobia therefore played a large role in how smoothly their influence spread over society. This led critics to perceive of biometrics technologies as a governmental means to control its citizens rather than to counter a real threat. It remains unclear however whether the introduction of different biometrics technologies was not as much motivated by fear and xenophobia as their acceptance by society.

The notion of privacy leans strongly on our implicit notion that we, as a human subject, have both an 'inside' and an 'outside' (Mordini 2008). The inside would be our private person, the outside our public persona. The inside is spiritual in nature, the outside has to do with our role(s) in civic society. If we carry through this metaphor, then indeed, we would have nothing to fear from biometrics technologies, since they cannot penetrate our innermost thoughts, desires, fears and sentiments. But this dual metaphor of having a private inner realm and a public outer realm is too simplistic. Our notions of ourselves stem from a multitude of different roles, functions and identities that exhibit aspects of both the private and civic. In that sense, any unnecessary disturbance of one's non-civic identity is to be seen as a harm.

The idea of balancing security and privacy is often used in legal and political discourse on biometrics. It departs from the assumption that they are relative rather than absolute principles, and that both should be given attention, rather than abandoning the one value of in favour of the other (Liberatore 2007). This assumption may however be mistaken. Some values and principles may not be negotiable, even if this means that other values and principles are damaged. And in many cases, there is more than one solution.

In the European Convention on human rights, privacy and personal integrity are not regarded as absolutes (with the exception of the right not to be tortured). For example, Article 8 of the European Convention on Human Rights contains two elements: Article 8(1) creates a citizen's right to 'private

and family life'; Article 8(2) creates the State's right to derogate from this right in particular situations that could broadly be described as 'the public interest', including national security, and the protection of the rights of other individuals. Therefore the privacy right is not an absolute right in European law (reflected in constitutional applications of the right in domestic laws, and for example, in Article 13 of the Data Protection Directive 95/46/EC). Indeed, it would be very difficult to see how it, and other 'human rights' beyond torture, could be constructed as absolute rights in society. The nature of rights-holding seems to be that it is relative to the claims of other rights holders. Thus, we are entitled, depending upon the particular circumstances, to a right to privacy – to a private self –, that is also required in different circumstances to take account of its public obligations. Individual rights, therefore, become seemingly negotiable.

Security is regarded as relatively less negotiable. The current vocabulary used to discuss the permissibility and moral acceptability of biometrics remains rather abstract, and does not take into account issues of definition, issues of technology innovation and the role and potential scientific expertise in finding solutions and shaping policies. Since there is a wide variety of biometrics technologies, it may well be that some are less damaging for principles of privacy, and personal integrity than others. Other 'relative' values considered to be important in the context of biometrics include freedom of movement, and rights of migrants and asylum seekers. It is adamant that such practical considerations are taken into account in the implementation of security measures such as current uses of biometrics technologies.

However, is 'security' different from 'privacy' and other human rights? Security is an expression of collective claims to privacy. My security is part of my privacy; a necessary part of my privacy, in that it is an expression of part of my right to be left alone (in the classic Warren and Brandeis (1890) construction of the legal concept¹). The interesting question is how the claim to an intervention in the name of the article 8(2) interest is framed. Part of

¹ The conceptualisation of privacy is a contested area of sociological and legal study. See, for example, Westin (1967), Allen (1999) and Laurie (2002).

the difficulty in studying the distinction between security as violation of privacy and security as protector of privacy is the lack of access to information about the reasoning and evidence of public interest appeals in cases. (Steyn 2004).

The implementation of biometrics is taking place without much attention to whether it is a suitable option to increase security. It may well be that, for example, infiltration and close monitoring of terrorist groups yields much more effective results than a widespread introduction of biometrics technologies, with fewer privacy intrusions in the general population. To put it with some exaggeration, biometrics may amount to a scatter gun approach. Up till now, the societal debate mainly focused on whether biometrics has a negative impact on fundamental rights. However, critical questions may need to be posed one stage earlier: An important pragmatic issue in this respect is whether the specific biometrics technology is a viable option. It often seems to be taken for granted that any biometrics technology will be effective, whilst there will be strong differences between the options at our disposal. Choosing between such options should be motivated by finding highly effective ways to identify threats to security, whilst minimising the intrusion into the private lives of citizens. This is not only an issue dependent of the biometrics technology in question, but also of their implementation in practice, their use, and the organisations, groups and individuals responsible for their execution.

The European Council expressed its intention to use biometrics to counter security threats with regard to visa policy to counter illegal migration (European Council, 2003) and security in the context of the fight against terrorism (Declaration on Combating Terrorism of March 2004 and Presidency Conclusions of the Brussels Council of December 2004). The policy measures taken to implement biometrics technologies were delegated in part to national governments, some of which were more active to follow up than others. The introduction of various biometrics approaches such as the biometrics passport was calibrated closely with similar policy decisions in the United States. Industry seized the opportunity to make use of this development whilst the ensuing public controversies focused on issues of

economic cost and issues human rights (most notably privacy). Non-governmental organisations such as Amnesty International, Privacy International and Statewatch and have expressed their criticism of the current implementation of biometrics and are also critical of their effectiveness in enhancing security².

Biometrics data have been kept under close scrutiny over these past years by a number of independent organisations such as the Article 29 Data Protection Working Party (2004) or the Joint Supervisory Authority of Schengen (2004). They both perceive of major issues with regard to the use of biometrics data for other than the originally intended purpose.

Public awareness of the nature, uses, perceived benefits and harms of biometrics technologies is increasing in several EU-member states due to their large scale introduction of biometric passports. As a result, public debate also increases³. One of the main topics debated is the problem of function creep, combined with the issue that surveillance may be used for goals different from countering security threats. Since the introduction of a biometrics passport goes outside of, and in some cases even counter to, democratic scrutiny, these debates are not likely to fall silent in the near future. The invisibility of the those that execute the surveillance only adds to societal concerns and tensions. The fact that individuals do not have open access to what happens with their personal data creates an atmosphere of mutual mistrust as the public sphere was and still remains completely disconnected from the arena of political decision making.

Current policies on biometrics are specifically European in nature. As Liberato states: “With regard to biometrics, so far the issues is distinctly “European” (namely in terms of EU-level decisions, European response to US initiatives) – with some “variations on a theme” such as the focus in the UK on the introduction of ID cards, in Germany on the costs of biometrics and

² E.g., Amnesty International, “Concerns in Europe July–December 2001”, <http://web.amnesty.org/library/index/ENGEUR010022002>; Statewatch: “Biometrics: The EU takes another step down the road to 1984”: <http://www.statewatch.org/news/2003/sep/19eubiometric.htm>; Privacy International: “PI forges coalition calling on European Parliament to stop mass fingerprinting proposal”: [http://www.privacyinternational.org/article.shtml?cmd\[347\]=x-347-85336](http://www.privacyinternational.org/article.shtml?cmd[347]=x-347-85336).

³ REF?

different views on its benefits within the governmental coalition, in France with regard to the broader context of rights on the Internet, in Italy where problems for privacy are strongly pointed out [...]” (Liberato 2007). This very pluralism in current introductions of biometrics technologies and their connected values is also to be seen as specifically European. This plurality should be respected on lower levels as well as on such a national level. Democratic involvement and democratic expertise may contribute to the complexity of decisions at stake. It would allow for an incorporation of a plurality of perspectives and different forms of tacit knowledge in policy making as well as technological innovation agendas. Public debates, stakeholder interaction and internet-based diffusion of and response to information would enhance public debate on biometrics. This would form a strong basis for a process-based technical, social, economic, ethical and legal assessment. It would increase the accountability of the parties responsible for the implementation of various biometrics technologies – one of the major problems in the public eye – and it would enhance the effectiveness of the measures in question.

Privacy has come to be construed as a public good that can be traded for access to goods, information, transportation and security. The Rathenau report ‘Check in – Check out’ specifically analyses such issues of identity management with regard to transportation (‘t Hof 2011). That is, one only has access to such goods if one is prepared to give up certain aspects of one’s private life and private identity. With regard to security, biometrics technologies in specific demand a trade from individual citizens for access to public spaces and transportation. Due to the top-down introduction of biometrics technologies, this is a trade off that can no longer be circumvented by choosing for alternatives. Individual citizens do not have access to their personal data nor do they have a view on what happens to such data. This means individual citizens cannot exert any control over their virtual identities. This does not only hold effects on public acceptance of the biometrics technologies involved, it also carries along serious issues of democratic legitimacy. It appears that the introduction of biometrics

technologies has challenged the traditional notion of security. Security was unproblematically seen as one of the preconditions of personal liberty. But as a result of the invasiveness of biometrics technologies as well as the unperceptability of how the resulting data is collected and used, it is now felt to be at a par with personal freedom. This means that, due to biometrics' effects on issues of privacy and data protection, the value of security is gradually becoming reified as something that stands in opposition to personal freedom rather than as one of its preconditions.

If there is no societal input in current applications of biometrics technologies for security purposes, an opportunity is missed for a more dialogical approach, therefore lessening the quality of such control systems, and increasing the establishment of a surveillance society that is no longer aimed at creating a secure environment for its citizens but takes surveillance as a goal in itself. Public support and public management of virtual identities is adamant for an introduction of biometrics technologies that is rational, democratically legitimate and effective.

Our technotope structures, enables and restricts our access the management of our identities, be they professional, personal or as a citizen. In this sense, the tendency of governmental bodies and macro-organisations to control individual behaviour and public life needs to be restricted and steered in a responsible fashion. If one frustrates individual life in society, this will bar individual freedom to creatively shape one's life and daily practices. In this sense, security is a two-faced daemon: although being preconditional for individual liberty in cases of extreme threat, it can evenly pose a threat to individual liberty if introduced as common practice in daily life. If those technologies that shape our environment restrict our access to goods, information, transportation, access to public places, they restrict our sense of belonging in this environment and therefore our sense of self. And if we no longer hold any individual control or authority over what happens to our personal data, this restriction affects and restricts our identities in an even more direct sense. Then, our technotope will be perceived of as totalitarian-technocratic in character rather than a 'natural' environment.

2.d. Both case areas in the larger context of the project

Public debates over novel technologies often aim at departing from some type of consensus to be able to come up with a consistent opinion for policy makers. Often, such debates therefore do not manage to go much beyond stating the obvious, or affirming long-established policy lines, based on already deeply entrenched interests and opinions. For a deeper analysis and a clear view on the issues that are truly at stake, a departure from dissensus is much more fruitful. For such dissensus, it is important to invite as many different stakeholders as possible to the negotiation table. The problem of current debates over dual use issues and over the introduction of biometrics technologies is that automatically, marginalised voices are not taken into consideration. This not only holds a negative effect on the quality of the policy making process in question, it also serves to radicalise the marginalised groups in question. On the one hand it reifies them as an invisible enemy that escapes further control due to their absence at this table, on the other, it only serves to increase societal concern and strengthen sentiments of fear and irrational xenophobia: the true problems are not solved, and the way they tackle such problems may even function as a self-fulfilling prophecy. Therefore, it is of the utmost urgency to take tendencies in current policy on for example security through biometrics and research restrictions to tackle security risks due to dual use potential under close scrutiny. It needs to be investigated whether the reasons behind current policies are still valid, whether the argumentation behind their implementation is sound or based on irrational internal motivations rather than real-life issues, which underlying values are at stake, which public concerns are not addressed and which parties are excluded from the debate.

In its hidden presumption of only specific sets of values, and its focus on ethics as add-on to existing research projects, current normative approaches to governance of science and technology both suffer from a democratic deficit and a lack of proper societal embedding of science and

technology. This is not only problematic with regard to the ethical justification of novel research agendas, it may also bounce back on the results and products of science and technology, since without proper embedding of scientific research and technology innovation in society, society is likely to reject its products. Ethics is often perceived of as ‘bad’ for research (hindering, limiting, criticising), but understood as a means to a socially informed form of research progress and innovation, it is a constitutive rather than a limiting factor.

In Value Isobars, values are conceived of as underlying structures that inform opinions, morality, ethics, preferences etc. By their very nature, values are not articulate. They can be seen as part of the implicit worldviews adhered to by different people, communities, institutes and organisations, and therefore stand in contrast with principles or interests. Principles are often taken as the basis for ethical assessments of science and technology, whilst interests are taken to be the pragmatic basis for policy making. An overview of relevant values would merge the need for an assessment of the ethical issues at hand, and the need to take into account issues connected to public concern. There is a connection between values and principles, which is sufficiently addressed by the Tübingen-partner of the project. Here it suffices to say that value dilemmas can be understood here as dilemma’s arising from a practical conversion of values into principles, interests etc. in a specific setting. Values in themselves are after all to undifferentiated to conflict with each other when leaving out any practical setting.

One of the main tasks of WP5 is to glue together the contributions of WP1– 4 in the concrete light of the two selected technologies. With regard to the choice of the technologies some questions were raised about their adequacy and special problematic since both seem somehow tied to issues of national security. One may miss an economy-based value case technology. This also raises the question of the quality control of the information gathered about them. More detailed reflections followed on the issue of identifying main players and their implicit values. Particular challenges may arise in respect of identifying relevant voices of the public. The role of WP5 in Value Isobars is

to demonstrate in concrete what a value-based approach to governance of science and technology consists of.

Value Isobars was not conceived of as a pilot for this novel approach. It rather aims to demonstrate the necessity of such an approach, and show which elements would be necessary to render it a success. In this regard, the project set out to elaborate the following three core tasks:

1. An exploration and explanation of what we understand a value-based approach to governance to consist of
2. An account of why we perceive of a need for such an approach
3. An overview of which elements such an approach would contain

Although the general target of the project does not include creating a pilot, a pilot will be part of what WP5 will deliver. For WP5, this means that we will deliver a hypothetical sketch of our approach, connecting the different work packages and their aims to the two case areas.

For WP5, it was reconstructed which values are at stake in both areas. Here we won't treat value dilemma's here by going into specific case areas, but rather the background meta-issues of the areas in general. The general nature of both areas poses some problems in making such a reconstruction, since it is in the specific practical cases that one will encounter specific relevant values. Still, it is possible to sketch out some general tendencies.

In general, Value Isobars aims for:

- An exploration and explanation of what we understand a value-based approach to governance to consist of
- An account of why we perceive of a need for such an approach
- A sketch of which elements such an approach would contain

WP5 aimed to study to case areas to be able to address value-related issues in both scenarios that The problem is that dual use is ill-defined. Some take it to mean non-military versus military use, others beneficial versus malicious use, implying a distinction between justified military and non-military use versus terroristic use. The implications of these two very distinct uses of the concept of 'dual use' render any clear analysis of the problems surrounding it very difficult. As far as dual use is defined, it is hardly clear

what values are at stake at all. Superficially speaking, it seems to imply an issue of unpredicted use of scientific research and technological innovation. This would for example include issues where health research yield military uses but janus-faced as it is, it also entails the opposite, military research accidentally yielding knowledge with health benefits. Similarly, reconstructive research to the Spanish flu may yield potential uses for bioterrorist uses. This

The main objective than seems to be one of creating a structure in which use of scientific knowledge and technological expertise can be controlled, predicted, contained, and the central moral issue would then be the potential restriction academic freedom this would pose. If one looks at the deeper significance of dual use, other issues arise, including:

- What do we consider illegitimate?
- Whom do we consider ‘terrorist’, and why?
- Doesn’t exclusion from the negotiation table lead to radicalisation?

To be able to tackle value-related issues of dual use in the development of medical research, one needs to take into account such issues as well.

In the case of biometrics, it is quite clear what values are at stake. Biometrics is very much an issue of safety versus privacy. More in detail, this includes the following issues:

- Psychological problems of feeling surveyed (a virtual panopticon)
- Avoidance of surveyed spaces
- Privacy in the public space
- False reliability, ritual senses of security
- Mistaken identity and its consequences
- Oppressed groups

The impact of the introduction of different biometrics technologies is however unclear, and the consequences on how society changes may be enormous. Security may become a goal in itself, rather than an instrument to prevent specific harms, an effect may be a shift in the mentality of governments and societies towards a surveillance-society. Is it the safety “culture” and the mindset of those working with the topic that is problematic?

Are they too much rigged to only see issues of risk and safety as relevant, ignoring issues of dual-use and security?

Publication of scientific research is crucial for scientific progress and technological innovation. But if publication in publicly available scientific journals poses a danger, should this open publication be restricted? And are there other ways to have scientists and society reciprocally enjoy the fruits of each others labours? Emphasising the dual-use dilemma may lead to further polarisation between different parties. What the one party considers to be national security or 'preventive warfare' the other may consider to be unjust warfare, what one party considers to be legitimate use of weapons against a far more powerful foe, the other may consider to be terrorism. It is unclear which parties are truly under threat. Should 'we' fear 'them' or should 'they' fear 'us'? Shouldn't we try to create a basis for dialogue rather than further polarisation? Which conditions can one create to this aim? When can one no longer pursue this route? Where should the responsibility reside for the problem of possible military use or terrorist use of specific technologies? Should it be the responsibility of scientists, companies and laboratories or governmental institutions? On what basis are they to decide which types of research should be under strict control, or even under 'embargo'?

Not only open publication but also access to certain facilities or instruments may be instrumental to malevolent use of certain technologies. In how far can these be restricted. Could international openness on research with a dual-use aspect to it help, or would it do the opposite? Should national interests always be the basis for action? How can national interests be wed to international cooperation. How can such cooperation render malevolent use less attractive? These are the type of questions with which we will try to elucidate our value-based approach, and which will function as an instrument to merge the different work packages in the final phase of the project.

3. Value–input and issues of public legitimacy

In the assessment of scientific research and technology innovation, public engagement has come to be seen as a crucial factor. As Andy Stirling states, there are substantive, instrumental and normative reasons to do so (Stirling 2006). The substantive rationale is that public engagement improves the quality of decision–making and ensures social robustness of science and technology; the instrumental rationale is that public engagement serves specific stakeholders’ interests to premeditate on possible societal hurdles and preferences and build trust; the normative rationale is that it enhances democratic legitimacy. In this fashion, public engagement exercises are expected to support rational decision making on the moral acceptability of technological developments. Currently, emotions are often disregarded in public engagement exercises. They are conceived of as a cause of bias, prejudice and as a sign of erratic opinion formation and irrationality. Therefore, approaches to public engagement are often construed to exclude this dimension: people with strong negative opinions and strong emotional responses to the technologies in question are often excluded from such exercises, since their participation might bias the outcomes of the exercise. There is reason to bring nuance to this dominant view on emotions as a source of bias. With regard to debates on risk, Sabine Roeser defends the need of emotions in decision making processes, claiming that instead of being a hurdle for rational decision making they actually constitute an indispensable normative guide in judging the moral acceptability of technological risks. They can be a source of valid intuition about risks since they form a window to the deeper lying values that inform societal discontent, public preference and the possible motivations for specific technology innovations.

Whilst it is taken for granted that ethical assessments of novel technologies are to be based on rational decision making, the morality that lies at the basis of ethical analysis stems from deeper felt values and emotions. In that sense, rationalism and intuitionism as a basis for a normative position are often construed to be at a par whilst they are not. The positive potential of emotions in rational opinion formation on novel

technologies can be expanded to other normative debates on new technologies such as naturalness, issues of playing God, of instrumentalising life, etc.. Engineers, scientist and policymakers involved with technology developments should therefore take the emotions of the public into account. From a philosophical point of view Roeser (2006) argued for the need of emotions in rational decision making on the moral acceptability of technological risks Still, it is very hard to motivate people without any emotional involvement in or interest for the subject to get engaged. The problem for current public engagement exercises is two-sided: those who have strong-felt emotions on a novel technology are to be excluded from such exercises, but those who do not, cannot be included easily.

Current approaches to the ethical assessment of novel technologies, in their advisory capacity to policy makers, tend to emphasise only one part of the horizon of ethics and morality: ethical assessments of regulatory frameworks often only address issues potential harm to people, and therefore remain restricted to issues of risk and safety. But there are other aspects of science and technology that may be perceived of as unethical such as, issues of medicalisation, mechanisation of the world, naturalness, human identity, playing God/hubris etc. Due to the current narrow approaches the ethical assessment of novel technology, such issues remain underexposed in policy making whilst societal concern over novel technologies often stem from such backgrounds. Not taking them into account is therefore not democratically legitimate and it potentially has adverse effects on the success of innovation processes with respect to their introduction to the market, or society at large.

Theories that were developed in the field of medical ethics have become a dominant force in the ethical analysis of other areas of scientific research and technology innovation. Both the traditional principle-based approach to ethics that was developed by Beauchamps and Childress (2001; 1979) and the theory of Justice developed by John Rawls (1992; 1971) lie at the basis of such approaches. These theories have a specific (neo-)liberalist background, and this elementary background frames contemporary ethical

advice on science and technology: liberalism tends to leave out issues of (personal or community) identity.

Both the emphasis on specifically neo-liberalist background theories and the focus on calculable, rational issues distorts the ethical assessment of novel technologies. A value-based approach to governance can partially remedy these current deficiencies and enrich existing approaches to technology foresights on the basis of qualitative research input. It is necessary to avoid creating an over-anthropological notion of values (in their relevance to science and technology' and then attributing some type of unfounded ethical legitimacy to such values. Values should be regarded, in part, as conventions that are part of a wider structure that may be termed 'world view'.

Currently, several problems are encountered by policy makers in governing scientific research and technology innovation. These include the unpredictability of the success of such processes, the unpredictability of scientific research as such, issues of public bias, issues of hidden interests amongst more powerful stakeholders and stakeholder clusters. Value Isobars aims to create an approach that might help solving problems that are encountered by policy makers in the regulatory process. This report not only addresses the role of the two example case areas but also this wider context of the project.

For the previous deliverable of work package 5 we reconstructed which values are at stake in two areas of technological development: biometrics technologies and dual use dilemmas in pathogen research. These two were taken to be central case examples to hypothetically test the potential of a value-based and value-informed approach to governance of science and technology. In the first place, these were seen to be good areas to test out the potential of our approach since they both concern an important area of public interest and public opinion formation: bioterrorism. On the other hand, they are complementary in their relation to values: whilst in the case of the development and introduction of biometrics technologies, it is quite clear what values are at odds (public safety, privacy, governmental control and

well-meant paternalism, individual liberty etc.), this does not go for dual use issues in pathogen research (what is dual use? is academic liberty indeed at stake? Which uses do we consider legitimate, and from what perspective? etc.).

An account of both areas was provided in the first deliverable. It listed which debates are currently ongoing in both areas, provided for case examples and provided for background material for the other work packages, 'Value Dialogue' in specific. This second deliverable will go somewhat more into depth and look at how both case areas address specific value-related problems in terms of governance. Although it is in the specific practical cases that one will encounter specific dilemmas, issues and relevant values, it is possible to sketch out some general tendencies. We won't treat value dilemma's here by going into specific case areas, but rather provide for a sketch of the background meta-issues of the areas in their relation to the other work packages and the project as a whole.

4. A value based approach: what does it look like?

It is very difficult to sketch out which values are particular to, or even unique to Europe. One cannot define Europe by listing a finite series of properties. One cannot define Europe by passively mapping the values that are internal to Europe. Europe is defined by values rather than historically drawn borders. We are not Europeans merely by our accidental inhabitation of the Western side of the Eurasian continent, nor is Europe merely the result of a historical coincidence that emerged from the ruins of the Western Roman Empire, and came to be circumscribed by Russia in the east, the Byzantine and later Ottoman Empire in the south-east, the Mediterranean in the south, the Atlantic in the West and North. The values that are held throughout Europe very much influence what we understand about the concept. In this sense, a short history of the European Union may be more helpful in defining what Europe is and where it is supposed to take us, rather than a list of disputable traits and properties. This shifts the focus from European identity (as a container term for the Spanish, Dutch, English, Italian identity etc.) to the identity of Europe, as an idea, an enterprise, and institute.

An issue that needs to be addressed in the coming stage of the project is how the different partners, with regard to their background expertises, interlink as building blocks for an integrative approach to a value based approach to governance. This question has not been easy to resolve, since they include legal, philosophical and social scientific expertise, as well as expertise on organising events to further public dialogue. The case areas that were elaborated by Maastricht for deliverable 1 can only partly fulfil this need, since not all partners have oriented their effort directly to these two areas (nor was this their original assignment). Nevertheless, some lines can be sketched out to demonstrate how a value-based approach to governance could further the policy making process on scientific research and technology innovation. To this aim, the third deliverable of WP5 (Maastricht) will include a paper which reflects the results of the other partners' efforts in an integrative way. A second paper will elaborate the concept of 'Value Isobars' in its potential capacity as a shortcut for policy makers to know what are the rights and wrongs with regard to governance and regulation/legislation.

From the outset, Value Isobars has been oriented to answering the question how far to take the metaphor of 'isobars' in its completion of the project. This included debates on whether to take the metaphor of a 'weather map' literally, what other visual and non-visual communicative aids would be constitutive for a value-based approach to governance, what material we would base such an approach upon etc. During our interim meeting in Palma de Mallorca, these issues were elaborated through plenary and group meetings, which resulted in several fruitful possibilities. For one, we agreed not to take the metaphor of a map to lead us to a geographical and nation-based overview of what values different regions in Europe adhere to, since the relevant communities include transnational communities such as expert scientists, protestants, farmers, second generation immigrants from different regions in the world, patient groups etc. These are the groups that need to be taken into account when developing an instrument to provide policy makers with input and insights on what to expect in the furthering and steering of scientific research and technology innovation.

We think that the idea of 'mapping' values can be enriched beyond either the already discarded notion of a geographical map or the concept of a visual account of high and low pressure zones for novel technologies. With regard to this meteorology-metaphor, high pressure areas are not per se negative or positive, they merely point to potential weather patterns. Other factors that can be included in an elaboration of this metaphor are the geography of the landscape below the clouds (mountains, plains, large water surfaces) that also has its influence on the weather. The landscape is the values. Planes cause different weather responses from mountains, water surfaces different from dry areas, volcanic activity has major influences overall. The different uses of the metaphor serve different purposes. It is not an issue of one geographical location having one value-system. Look at it as a dynamic system: e.g. what happens when values clash? Between experts and laypeople, between Germany and England, between the Catholic Mediterranean and the Calvinist North. Of course, this is all merely an allegory to what values are and how they function in relation to support, opposition, concern and optimism on novel technologies, but even in its

mere capacity as a metaphor, it can deliver a very useful tool for advising policy makers. The metaphor can also be extended to other elements such as the idea of a TomTom for regulatory process on S&T. which provides with warning and guidance whils tsterring through decision making processes.

5. Future tasks

For the remainder of the project, we will focus on writing/finalising three papers. The first paper will aim to merge the other partners' reports and it will give an account of the nature of a value-based approach to the governance of scientific research and technology innovation. The second paper will address the concept of value isobars as a shortcut for policy makers to know what is right and wrong with regard to legislation. In this paper, we will give a richer account of the metaphor of 'Value Isobars'. It will include the idea of a TomTom for a regulatory process, research how far the meteorology-metaphor can be taken, look at what we mean with pressure systems. The third paper will look at the distinction between European values and the values of Europe (as an institution): as addition to this, we will address the issue when and why we call something 'un-European' and who, in this context, are 'on the outside'?

5.a. Introduction

In a sense, one could say that the landscape is the values. Planes cause different weather responses from mountains, water surfaces different from dry areas, volcanic activity has major influences overall. The different uses of the metaphor serve different purposes. It is not an issue of one geographical location having one value-system. Look at it as a dynamic system: e.g. what happens when values clash, between experts and laypeople, between Germany and England, between the Catholic Mediterranean and the Calvinist North? Hereby we can give an account of how this might help solving problems that are encountered by policy makers in the regulatory process.

With regard to these papers we will also look at what are values 'as such'. Contact was established with Dr. Sjaak Koenis of Maastricht University's faculty of Culture and Science: he is interested in the question whether we are 'over-valueising' ethical debates (Koenis, 1997). His position is that conventions, in practice, function much better. And conventions are not precipitated values. You learn dignity through use/game, not through

explicit articulation: 'leaving it implicit'. Contact was also established with Prof. Tjalling Swierstra, who is a philosopher of technology.

5.b. A look at the next phase: the Institutional Context for European Values and the relationship between values and the 'democratic deficit'

Europe is seen to suffer from a democratic deficit, even after the changes brought through the Treaty of Lisbon. Whilst the European Parliament is elected democratically, the European Commission is not. It may not need to be, since it is a civil service, but it should address issues of public participation and democratic legitimacy in other fashions. Europe's process of unification took an important step forwards in 1992 with the treaty of Maastricht (Treaty of Maastricht 1992). The occasion was presented in a vocabulary that very much addressed the issue of the nature of Europe and its values (Bremer 1992). But the process of European unification starts before 1992. 1992 is another step on a route towards a Federal Europe, but its origins reach further back than this. The European Union started off with the European Coal and Steel Community (ECSC) a six-nation organisation that served to unify Western Europe during the Cold War. The ECSC was the first organisation to be based on the principles of supranationalism. The idea of such an organisation was proposed in the aftermath of the Second World War, by the French foreign minister Robert Schuman and his close friend, the politician and business man Jean Monnet, as a way to prevent a new conflict between France and Germany and to further economic development. In essence it was the alternative to the treaty of Versailles that proved to be a disaster after the First World War. The ECSC consisted of France, West Germany, Italy and the three Benelux states: Belgium, Luxembourg and the Netherlands. It aimed to create a common market for coal and steel. The cooperation was signed at the treaty of Paris in 1951. The Treaty establishing the European Economic Community (the EEC Treaty; often referred to as the Treaty of Rome) extended the initiative. It was signed in 1957.

The European Union has sometimes been presented as the resurrection of the ancient ideal of a unified European Nation. At the occasion of the signing of the treaty of Rome (1957), whilst looking out over the Forum Romanum, Belgian politician and co-founder of the EEG, Paul-Henri Spaak remarked to his chief of staff, Baron Robert Rothshield: "I think we have re-established the Roman Empire without a single shot being fired"⁴. The EU usually tries to abstain from such imperialist profiling since its ideals and origins lie elsewhere. The cradle of the EU stands in the ruins of WO2 rather than in an imperialist tendency to recreate the old Roman, or, if one prefers, Carolingian empire.

The European Council is constituted from the domestically elected Ministers of State of the Member States, and is therefore part of a democratic Europe, but this is also somewhat forgotten because of the relationship between the Ministers and their respective executives rather than parliaments, and because this executive is not accountable within the European Parliament in the same way that a domestic Executive has the membership of the Parliament to which it must account. The European Commission, like any domestic Civil Service, is not elected. The Commissioners are nominated from the Member States and the Council, and are accountable to the Parliament. However, the Commission is seen, because of its relationship to the creation and implementation of European law, to be rather less democratically accountable to the citizens than might be expected in a modern democratic state. This is, in part, because the relationship of the European suprapstate is less defined than the relationship of other international and domestic institutions of state power. It is also less clearly defined as the nature of the European surpastate is contested. The European project has moved from an agreement between six countries about coal and steel production, to a fledgeling federal state, without actually expressing this goal. It is a quiet struggle between two ideals – a complex trading agreement, and a single European State – and in this struggle there will always be conflicts. The 'European Project' has brought peace between the nations since the 1940s, but it has not resolved the tensions that brought

⁴ <http://www.brusselsjournal.com/node/2018>

the long history of wars between the European states before that time. The European Project has merely managed the struggle for European identity without the need for armed conflict; the European conflict transforms the armed conflict into a political and economic conflict.

After 18 years, the existence and the nature of the European Union, in the form of the European Parliament, European Commission and all other affiliated sub-branches and organisations, is well-established. Its existence has permeated through to the veins of European national and regional politics, and its effects pervade many aspects of private enterprise and citizens' daily lives. This influence is not appreciated on all levels or by all citizens throughout Europe and for many organisations and individuals the justification of this presence is not immediately evident. As a result, public support for European policy is not optimal. This was quite apparent when two member states voted against the full adoption of the Treaty of Lisbon. And this in spite of the fact that this treaty emphasises values and principles beyond monetary and economic cooperation (originally intended as a means to prevent further war) such as autonomy, privacy etc. (Treaty of Lisbon 2007).

We claim that part of the problem lies in the absence of a transparent democratic support structure for the EU. A specific problem lies in the absence of a communicative platform that functions both upstream and downstream, on which the values that lie at the basis of the EU's existence and self-definition can be made explicit and adjusted where necessary. Policy makers therefore lack the knowledge on what the public thinks, supports, and might reject. This paper's agenda is to discuss the potential of such an active reorientation and revision of a value-based self-definition of the European Union. However, whilst the democratic deficit is not about the institutional structures of the Union per se but is more about the nature of the information that is informing the operation of those institutions, there is a larger question that relates to the values. As was seen in the national debates about the acceptance of the Constitution preceding the Treaty of Lisbon, there was a greater debate in the populations of the Member States about the purpose and direction of the European Project. Whereas the slow

creep approach to a Federal Europe is seen in the expressed opinions of the founding fathers of Europe in the 1940s, there is no real up- and downstream debate about the sort of Europe that we wish to see. And this produces a greater sense of deficit. But the creation of States, be they domestic or international has traditionally not been through debate and the ballot box. Statehood, it would seem is not something that is forged in consensus or by majority vote. Where sovereignty is challenged, individuals struggle to maintain their vision. The challenge for Europe is to know how far the integration project can progress before it makes the step too far and plunges Europe back into armed defence of national existence.

Europe is clearly moving in a different direction, or with a different method, from the direction and method leading to 1945. The method is now clearly through the development of democratic channels to develop relationships between countries, and geographical control is no longer the vehicle for economic security. The Member States from 1945 seem to realise that their interests are best served collectively, to some (as yet undefined) extent. This, as is seen increasingly over the period, and particularly through the Treaties of Maastricht and Lisbon, requires the development of relationships between the European suprabate and the rest of the world. This is, in line with the continued primary economic focus of the Union, about competition in world markets. However, since the international challenges of terrorism since the beginning of the 21st century, there is also a different agenda required to protect those economic markets. This poses a great challenge to the development of the Union, not least because it poses different threats to the particular Member States and their external relationships. This has, arguably, placed a strain on a democratic system that is in its infancy. Europe was searching for its democratic identity before the terror threats, and within a period of relatively stable economic growth in the Member States. It still struggles with its identity, but within a much less stable political and economic environment.

The democratic deficit is more than a matter of rules of Parliamentary elections. It is about public engagement in issues. Public engagement in

Europe is about hearing competing voices in each particular issue, and making decisions that respect those differences, and that enable individual citizens to feel that their opinions have been respected. This does not mean that all opinions must be followed, but the processes of decision-making must hear and respond to the voices.

6. Addendum

For this second phase of the project, Maastricht interpreted its duties the workpackage to go beyond a mere deepening of the issues already analysed in the first phase, and aim at a preparation for the important third phase as well. For deliverable 2 this means that this report is both a reflection of an extension of the results of deliverable 1 and an introduction of what can be expected for the third phase. The reasons for this are the following: in our first deliverable we already addressed which value dilemmas pertain on both case areas, an elaboration of which will be provided with in the papers planned for deliverable 3. Communication on both case areas with the other work packages, Value Dialogue (Vienna) and value regulations (Lisbon) in specific, was already well-established and to give an account of the values pertaining on both areas in a deeper fashion would mean that we would need to provide for a pilot of a value based approach to governance, whilst in the consortium's meeting in Tübingen it was already decided that even for the project as a whole, a pilot would not be achievable, let alone that this would be feasible for just one partner. For deliverable 2, we did not see what the use would be of a repetition of the same exercise as the one that yielded deliverable 1, so to be able to provide the project with useful input, we decided that a more fruitful approach would be to study the general nature of the project, focusing on the issue of the role of European institutions in making policies on case areas such as those elaborated in deliverable 1. So, in this second phase of the project that we have concluded now, we focused on clarifying the connections between values, and decision-making and governance more generally in Europe – considering the competence of the European Union in relation to the dilemmas and cases.

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