Open questions WM0320TN + WM0329ST, 11 October 2005

Answer the following five questions. Be concise in your answers. Say what must be said and no more than that.

Use a separate sheet for each of the five questions. This is needed in view of the process we use for grading your work.

The open questions together make up 3/4 th of the grading, i.e. maximally 7,5 points. You can earn an equal amount of points for each of the five questions.

1. Ethical problems in business and government organisations

David Jackson was the engineer working for the private company Z-corp who was facing some hard moral problems in the video Gilbane Gold.

a. Given the facts and events described in the video, it is quite conceivable that at least some public officials working for the city of Gilbane were also facing a moral problem relating to the same case. Explain, and describe such a moral problem.

City officials received monthly reports revealing that Zcorp's waste water may sometimes exceed discharge limits (see Workbook). In addition, it is conceivable (but not confirmed in the video) that city officials were aware of the flaw in the law regulating the discharge of toxic substances, and that they were aware of problems that this flaw would or might give rise to. Nevertheless, the officials did not express their concern to Zcorp. Neither was the flawed discharge law brought up for discussion in the city council (the gemeenteraad). Perhaps the city officials or the responsible politician(s) in the municipality (the wethouders in the Dutch situation) were afraid that if they would urge Zcorp to take measures, this would undermine Zcorp's profitability, and hence would expose the city's tax income and labour opportunity from Zcorp to risk. For such reasons it is conceivable that city officials were facing moral problems quite similar to the ones faced by David Jackson.

Answers deviating from the above pattern have been assessed according to their merits.

Read the following information, and then answer the subsequent question b.

In 2004 the Dutch parliament appointed a temporary committee (de tijdelijke commissie Duyvesteijn) with the assignment to evaluate the decision making regarding a number of large recent infrastructural projects in the Netherlands. The committee formulated recommendations aimed at improving future decision making on such projects. Two of the recommendations are these (Source: NRC, 15 December, 2004):

- 1. The national government (the ministers forming together the cabinet council) should be given the duty to "actively" provide the parliament with relevant information. At present, the ministers merely have the ("passive") duty to provide information at the request of the parliament.
- 2. The parliament should obtain the right to hear public officials (e.g. persons working in a government ministry).

These recommendations could be applied also at the level of local government. In the Dutch situation, the corresponding bodies at the local level are the College van Burgemeester en Wethouders (the Mayor and aldermen; the municipality; to be compared with the cabinet council at national level) and the Gemeenteraad (the municipal council or city council consisting of representatives chosen by the citizens; to be compared with parliament at the national level).

b. Explain whether one or both of the recommendations, if implemented at the level of cities, could have a diminishing effect on the moral problem of the fictitious public official constructed under a, and whether the recommendations could have the effect of reducing the probability of the problem to arise.

The following answer is framed in terms of the Dutch structure of city government. If wethouders have the duty to actively inform the gemeenteraad, and if ambtenaren (city officials) can be heard by the gemeenteraad, then you might expect that the officials (ambtenaren) and the wethouders would actively seeking information (for instance about the situation at Zcorp). It can also be expected that the wethouders are more likely to actually inform the gemeenteraad about problems they know of. This has at least the effect that the moral dilemma is shifted from city officials (ambtenaren) to the politically responsible city

council, therewith lifting the moral burden from the city officials, at least partially. In addition it would bring the gemeenteraad in a position to provide a (political) solution to the dilemmas, which is not possible if they are unaware of existing problems. Stated in a more general way, recommendations 1 and 2 can be expected to promote transparency and openness of city government.

Answers deviating from the above pattern have been assessed according to their merits.

c. Also explain whether one or both recommendations could have the effect of diminishing the moral problem(s) faced by David Jackson, or could have reduced the probability of the moral problem(s) to arise.

The situation described under b would seem to enhance the likelihood, either that the city officials impose pressure on Zcorp management to comply with regulation, or that the flawed legislation would be brought up for discussion (and possibly improvement) in the gemeenteraad, or a combination of both. In all cases there would be less need for David Jackson for considering the dilemma whether he should blow the whistle or not. It may be remarked that the recommendations described above would not take away all possible moral problems for David Jackson. For instance, there might be other technical issues which might result into risks created by Zcorp for others. These risks might not be known to the city officials, and Zcorp might choose to remain silent about such issues (for instance if Zcorp would not be legally required to provide such information).

Answers deviating from the above pattern have been assessed according to their merits.

2. What is the relation between the following groups of concepts:

For each of the two groups of concepts/ideas a and b below, write a short piece of text in which you relate the mentioned concepts/ideas to each other. Your text should make it clear that you are acquainted with the different concepts/ideas, and should reveal the relation between them.

- a. Legal person; limited liability; deterrence trap.
 - The meaning of all these concepts is clearly described in the reader, esp. chapter 7.
- b. Kant's categorical imperative; Wicksell's view of just government activities (exemplified by the example of the size of the Swedish Royal Band); law viewed as a solution to Prisoner's Dilemma situations; the social contract approach to ethical principles

These concepts have been discussed at various places in the study material. Wicksell's view was described in the lecture on public choice. According to Wicksell the only legitimate government actions are based on consensus decisions. The law as a solution to PD situations was discussed in ch. 7 of the Reader, whereas Ch 9.2.2 of the Workbook is also relevant here. The social contract approach was described in the lecture on ethical principles.

3. Objectivity of statements, risk assessment, and risk evaluation

In the lecture on ethical principles a proposal was introduced for a definition of the concept of a subjective statement. According to that definition, a statement is subjective if that statement can be denied without denying empirical facts or violating (deductive) logic.

a. Make a reasoned proposal for a definition of the related concept of an objective statement.

The definition that was expected here is this: an objective statement is a statement that cannot be denied without denying empirical facts and/or deductive logic. An equivalent formulation is this: an objective statement is a statement that can only be denied while at the same time denying empirical facts and/or deductive logic. Most of you gave this definition (but sometimes they seemed to forget to use that definition while answering the other questions).

Using your definition, answer the following questions:

b. Are objective statements possible in ethics? Give your reasons.

Many answered that, as ethics is about good and bad and about judging right and wrong behaviour, there are no objective statements in ethics. Not all of you applied the definition

provided under a. to substantiate the claim that there are no objective statements. Only few remarked that, even if objective ethical statements are not possible, it remains possible to formulate objective statements (according to the definition provided) regarding (normative) arguments. For instance, objective statements are possible of the type "if ethical principle x is assumed, then ethical consequence y follows". An example from Ch 3 (p 45) of the reader is this: "If the right to life is inviolable, then it is not permissible to impose life-threatening risks upon others without their consent." This statement about statements appears to be objective (in the sense of the definition mentioned), even if the statements taken in isolation are considered as being subjective.

Some answered that there are objective statements possible in ethics. As examples they gave examples of factual statements. But factual statements in themselves do not belong to ethics (they may belong to natural science). What they had in mind is that factual statements may enter as premises into a deductive argument which also has normative statements among its premises, and which may have a normative conclusion. The objectivity here is in the deductive argument, expressing logical relations between statements, as explained above. This should have been explained in the answer.

c. Are completely objective risk assessments possible? A risk assessment is an estimate of the magnitude of a risk, in terms of possible effects and probabilities of those effects materialising. Give reasons for your answer. If useful, you may provide examples to clarify your answer.

Most answered that this is impossible in real life cases, as in such cases there is always a need to make assumptions in the risk assessments, and these assumptions can be denied without denying empirical facts or deductive logic. Some argued that in principle, objective risk assessments are possible, given sufficient data and knowledge, but they often added to that that in practice the required data and knowledge are often not fully available. Both types of answers were considered OK.

d. Are objective risk evaluations possible? A risk evaluation is a judgement of whether a risk is acceptable or not. Give reasons.

Many answered that this is not possible in principle, as these evaluations depend on the value systems of people, which may differ over different people and which do not satisfy the definition of objectivity mentioned above. This is also the answer that was expected here. It should be remarked that if 3.c was answered in the negative (not possible), then this leads to a negative answer of 3.d as well.

4. Societal management of technological risks by imposing liability or eco-taxes

In a book by K.S. Shrader-Frechette titled *Risk and Rationality. Philosophical foundations for populist reforms* published in 1991, recommendations are formulated for effective and socially responsible management of public risks, notably the risks created by technology. One of the recommendations is this:

"Force people to pay for the risks or harms they impose on society, by internalizing the externalities or social costs of employing hazardous technologies. One way to internalize social costs would be to impose strict liability on those who have caused societal risk or harm. New Jersey's Major Hazardous Waste Facilities Siting Act, for example, contains a provision for strict liability. [...] The act permits compensation for damage without proof of negligence. By using liability to internalize externalities, the New Jersey law helps the *price* (paid by consumers) of the goods generated by a risky technology to reflect the overall social *costs* (such as injuries or pollution) of producing them. [...] The more the market and the regulatory system reflect true damages and expenses, the greater the incentive to lower the social costs of risk. And the greater this incentive, the better mechanism we have for deterring environmental harm and for allocating risks in an equitable and efficient manner."

Other authors have proposed the device called eco-tax as a means for internalising (negative) externalities of certain types as an alternative to imposing liability.

Questions:

a. Discuss the limits of "reflecting true damages and expenses" into market prices by imposing liability and by introducing eco-taxes.

Elements for answers to this question can be found on the sheet "Internalisation of external costs. Problems and limitations." from the lecture on Ethical Principles.

One limit is that it must be possible to give a monetary value to the harm. This causes problems when harm is irreversible, as in the case of irreversible environmental harm or deaths. If it is not possible to give a monetary value to such a harm, then it is not clear how liability and eco-taxes can be said to "reflect the true damages". For eco-tax, a specific problem is that it may not be known in advance what the magnitude of the harm that will be caused by a certain product is and hence how high the tax should be. For liability, it must be possible to identify who caused the harm done when it is done. If legal liability is limited then the result may be that only part of actual or expected damage is reflected in market prices. If legal liability is subjected to conditions (such as e.g. "no liability without fault"), then also this would not seem to result into "reflection of true damages".

Some limited their answers to considerations regarding the impact of imposing liability or ecotaxes upon technological development and innovation. This was not exactly what was asked, but answers have been judged on their own merits: i.e. how well such answers were argued for

b. Give your reasoned opinion as to whether, in order to "reflect true damages and expenses", political decisions regarding eco-taxes and liability should be taken by consensus among all involved (in the sense of the reader), or whether for such decisions a majority in the state in which the risky activity takes place suffices.

Many answered that such decisions should be taken by a majority in a given country, because consensus is practically impossible. So apparently they assumed (but usually did not clearly state) that consensus would be better if it could be attained. Some remarked that a 80 % majority is better than a 51 % majority, which would be consistent with the reasoning that in principle consensus is the best rule. Few remarked that many of "those involved" (i.e. those who are subjected to negative consequences) may live outside the country in which the activity takes place, and hence that a majority decision in that country may actually be a minority decision with reference to the group consisting of all involved. Did those who did not notice this intend to say that actually minority decisions suffice? Some quoted the NIMBY phenomenon as a reason why consensus is impossible. They apparently failed to notice that, if social progress is interpreted in the Kaldor-Hicks sense ("Potential Pareto improvement"), those who benefit are in principle capable of compensating those who are made worse off by the change and because of that act as NIMBY's. One of you answered that it is best to take decisions by majority vote, on the condition that "here are no minorities that suffer the consequences of this voting." However, in that case, consensus would appear to be possible in principle. Very few of you had remarks on the implications of lack of consensus regarding harmful or dangerous activities for legal liability, notably the duty to repair damage that might fall upon non-consenters. Some argued for majority decision making, as some affected stakeholders will never agree to e.g. environmental legislation that burdens them with net costs (e.g. a polluting industry). The argument shows that the question of the proper decision rule (e.g. majority or consensus) cannot be completely isolated from the question what, in the absence of any agreement or decision making, are the basic rights and duties of individuals towards each others. (E.g. the question arises whether it is allowed to pollute the air without the consent of others inhaling the air, so that these others must offer the polluter compensation in return for pollution reduction, or is it forbidden to pollute in the first place if there is no consent of those who breathe the polluted air.)

The same author implied that in the USA anno 1991 the costs and benefits of public risks were not distributed fairly over the different members or groups of society.

c. Indicate whether you agree or disagree with this claim if applied to the Netherlands (or another country that you associate with) anno 2005. Give your reasons.

This was a very open question, and answers have been assessed primarily on consistency and logical force. Very often, answers did not at all follow (deductively) from the arguments provided. Here below, a variety of answers have been reproduced that have been provided by TUD students. The comments added between [..] point to weak links in the deductive

arguments provided. Strictly speaking, most of these comments point to the fallacy of "non sequitur" ("the conclusion does not follow"), which is a violation of the rules for (collective) reasoning stated in the reader.

One group answered that the costs and benefits associated with public risks are not distributed fairly in the Netherlands. Usually this claim was substantiated by giving examples of unfair distribution. Examples given include the following. (Edited. Comments between [].)

- If people are forced into high risk occupations for their subsistence just because they have no real choice, then this is unfair.
- People with more influence, power, and money are better able to protect themselves from risks than others. [It was not explained whether and why this is unfair.] For example, houses nearby factories are cheaper; hence poor people live there because richer people can afford to live in safer places which are more expensive. [Again, is it unfair and why?]
- In the Netherlands there are many activities (such as centralized power generation, Schiphol, port of Rotterdam, and the Betuwe route) which cause costs for bystanders/neighbours, whereas the benefits are incurred (mostly) by others. Because of this trait, it cannot be maintained that cost and benefits are distributed fairly. [Neither can the opposite be claimed on this basis.] Some pointed out that even if you are financially compensated for the diminished value of your home due to a road to be built nearby, you do receive additional risk (and noise) from the road, and this is not included in a compensation for the decreased value of the house.
- Costs and benefits are not distributed fairly, because social (external) costs are not
 paid directly to the persons that have the costs. [To this it may be added that the
 possibilities to reflect external costs in monetary terms are limited, see a above.]
- Costs and benefits are not distributed fairly, because part of the costs is covered from tax money, and the ones who pay the taxes need not be the ones who created the risks hence caused the costs.

Another group stated that in contemporary Netherlands, the costs and benefits of public risks are fairly distributed. Below follow some of the (non-conclusive) arguments as provided. (Edited. Comments between [].)

- Industry nowadays pays a lot of money for internal and external safety. [leads to fair distribution?]
- Government supports green technology [leads to fair distribution?]
- Everyone is insured for external risks [hence fair?]
- Costs of risks are covered by taxes, which are related to income [hence fair?]
- Costs of risks are paid by consumers via devices such as eco-tax [see limits indicated under a above]
- Costs of public risks are carried by those who cause the damages [is this true in reality? see in addition limits indicated under a above]
- In places where there is a public risk (such as in the vicinity of Schiphol or Pernis) the houses are cheaper, hence living is cheaper there, and this compensates for the risk, hence through such mechanisms risk is distributed fairly. [But what if someone starts building a Schiphol or a Pernis next to someone's house (without his consent)? This will create a risk to the house owner and will lower the price of the house. Fair?]

None answered that it cannot be said whether costs and benefits of public risks are distributed fairly as long as certain conditions have not been fulfilled. Such a condition might be that people subjected to public risks should have given their informed consent. (Even then the problem might remain that some people may be "forced into" consent because they have no real choice, like in the case of poor people having to accept dangerous work.)

Some answered to 4a that attaching a money value to e.g. environmental harm or deaths is subjective, and to 4b that decisions should be taken by consensus in order to prevent minorities from being exploited. No one of these answered to 4c that consensus is required about the basic rules and institutions that determine the distribution of wealth (and risk) in order to assert that a given distribution is just. In the language of some social contract authors these basic rules and institutions would be called "the constitution".

5. Responsibility of a multinational producing a fertiliser/herbicide

Imagine you are the manager of the Process Development department of a multinational fine chemicals producing and selling company. The company has a good reputation with both the public at large and the governmental authorities; at least in its home country. It operates in many countries, some rich and highly developed, some poor and with a fragile economy. Your company is in the top three league worldwide, insofar as technical prestige and profitability are concerned; it is growing healthily.

Your department has successfully completed a new process design for a novel organic fertiliser/herbicide composite product. Its manufacture relies on GM modified bacteria. The fertiliser will significantly improve the productivity for several crops, some of which will then be suitable as harvestable raw material for cost competitive bio fuel.

The development of the new process and the product testing so far has cost 10 million euros and the maintenance of the worldwide patents will cost another million euros per year.

Next week you will have to make recommendations to your Board of Directors, who have supported this development through the years. They expect you to indicate the countries where to invest in new manufacturing units. To recover the development costs, several production units will have to be built. The success of this development has made you eligible for an important promotion.

You and a few of your staff know that the risk of some bacteria remaining in the fertiliser/herbicide cannot be completely eliminated. The bacterium is handled with utmost care and protection within your company's laboratory facilities. The bacterium itself, when ending up in 'hostile' hands can be used as a bio weapon. Although the process has been designed to the highest standards, you cannot fully guarantee that no dangerous quantity of the reaction materials occurring during the manufacture will ever end up in a production plant effluent.

Questions:

- a. Is there a utilitarian aspect to your dilemma on what to tell the Board of Directors? Explain.
- b. Is a Kantian view possible and/or relevant? Explain.
- c. What is your view on the technological risks?
- d. Briefly indicate how you would view the respective responsibilities, for you, the Board or the Company supposing the Company is headquartered in Continental Europe, the UK or the USA respectively?
- e. What would you propose for the management and control of the potential pollution problem(s) and the ensuing accountability and possible liability?
- f. Finally: State your arguments for your recommendations whether or not to build the new production facilities for this product and, if so, give some selection criteria for the countries for which you would be prepared to share the responsibility for the ethical acceptability of the investment.