Integrity management: The case of ProRail and seven engineering companies

By Andre Nijhof and Thijs Rottier

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Abstract
This paper presents the results of a unique project on joint integrity management between one of the major Dutch contractors and seven engineering companies. Due to the setup of the project, it was possible to relate the ambitions and intentions as stated in integrity programmes with the actual execution of construction projects. To achieve this, it was crucial to make integrity concrete, based on real life experiences. The project results show that there are only marginal differences between the project’s aspirations and the adopted values when integrity management is analysed on the management level. The tensions around integrity management only become visible when the actual dilemmas at the different levels of an organisation are taken into account. These dilemmas, and their causes, provided a sound basis on which to discuss one another’s roles in both provoking and dealing with integrity dilemmas. Based on the sharing of integrity risks, corrective actions have been taken that not only raise the level
of integrity management but also has positive consequences for risk control and efficient cooperation between all the participating organisations.

**Keywords:**
Integrity, integrity management, risk management, organisational values, trust, BIMS, Dutch affair on price-fixing, corrective action.

**Introduction**

Integrity management has a long history in the construction industry, especially in consulting engineering. For example, since 1917 the Dutch association for consulting engineers (ONRI) has referred to integrity and independence as preconditions of membership. Also, the international federation of consulting engineers, which has members in more than 60 countries around the globe, initiated a discussion on integrity management. This resulted in written guidelines (FIDIC, 2001). This guide calls for compliance to four requirements, namely non-engagement in bribery, extortion, fraud and collusion. These issues are especially relevant in an international context (de George, 1993).

In particular, the requirement not to engage in collusion has proved to be relevant to the Dutch construction industry. On the 9th November 2001, a former director of a Dutch construction company revealed in a television broadcast that price-fixing was widespread. He could prove this because he had a copy of the duplicate bookkeeping of his former employer with the names of hundreds of companies taking part in this practice. Following this, a huge investigation was conducted by the Dutch parliament, the justice department and the Institute for Fair Competition1, resulting in approximately €500 million of fines and claims (Financieel Dagblad, 2005).

Although it seems that engineering firms had, despite some of their departments undertaking construction work, not taken part in the price-fixing, this affair had huge consequences for them. This is partly because they frequently work together with construction companies, for example in consortia for Design & Construct projects; but more significantly because the image of the whole sector was corroded by the incidents and associated public discussion. Therefore, questioning one’s own integrity became a key issue for all parties in the construction industry, including engineering firms, contractors and the public clients. Integrity management gradually became a *condition sine qua non* in the Dutch construction industry.

Over recent years, many initiatives have been started with respect to integrity management. Alongside seminars and frequent opinion articles in the specialist literature, activities around codes of conduct especially catch the eye. The trade association, Bouwend Nederland, calls for all its members to sign a general code of conduct with statements on obeisance to the law, prudence with gifts, use of compliance officers and report structures for malpractices (AVBB, 2003). Although these codes can have a positive impact on integrity, they also raise questions about the depth of these activities: do they really change the opinions, values and associated behaviour of participants? In this respect, Weaver, Trevino and Cochran (1999) stress that stimulating integrity should encompass both the formal system of an organisation, such as the rules, reward systems and training, as well as the informal systems, related to habits, heroes

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1 A translation of the Dutch organisation Nederlandse Mededingingsautoriteit (NMa)
and informal norms. This view is shared by other authors who stress the strong influence of organisational systems, both formal and informal (Adams and Balfour, 1998; Werhane, 1985).

Against this background, both ProRail, the main principal for the construction and maintenance of the Dutch railway system, and the trade association for engineering firms were looking for opportunities to reinforce their integrity management. Both parties shared the view that stimulating integrity required a joint effort. The questions, requests and behaviours of one party affect the considerations and behaviour of the other party and vice versa. Furthermore, the code of conduct of ProRail stated that contractors are not allowed to have contradictory requirements in their own code of conduct, stressing the importance of aligning the different codes. Therefore, ProRail and most of its contracting partners for engineering activities initiated a project with the objective of enforcing integrity and mutual trust between the participating parties.

Methodology
Based on several initial meetings, the participating parties reached an agreement on the goal and associated activities of the project. The main goal was formulated as an investigation and sharing of integrity dilemmas and risks with regard to mutual relations in order to tune and enforce each other’s integrity management system. For all parties, it was clear that such an investigation should encompass both a top down and a bottom up approach. The bottom up approach focused on the project level because the major integrity risks were seen as being related to the tendering and execution of projects. However, because it was seen as important, investigations would first be conducted to analyse whether the aims with regard to integrity management were the same among the various participating companies. This line of reasoning was encompassed in a project plan with three consecutive phases:

**Phase 1: Comparison of codes, directives and aims**
For this first phase, three different methods were used. Firstly, the codes of conduct of the participating companies were collected and compared to see whether they gave the same kind of directives to employees. Secondly, interviews with the director responsible for integrity management gave further insights into the directives, the main issues and the aims of each participating company. Thirdly, the findings were discussed in a joint meeting of the directors to achieve commitment for follow-up actions and to create trust that any open sharing of integrity risks would be backed up by the boards of directors.

**Phase 2: Analysis of integrity risks**
While the first phase focused more on the formal aspects of an integrity management system, this second phase was led by the experiences of project leaders and other project participants. Group sessions were organised in order to investigate the major dilemmas encountered in the relationships between ProRail and the engineering companies. In the initial sessions, project leaders from participating companies shared concrete incidents with each other in order to create trust and openness about actual behaviour. In some cases, a follow-up session was organised where two engineering companies discussed issues together, or one engineering company discussed issues with representatives from ProRail. During the group sessions the chairman of the meeting had a crucial role in ensuring that the sharing of incidents would not lead to repercussions. Furthermore, the chairman had to stimulate an active debate, not about hypothetical dilemmas but about real life experiences. Only afterwards, in an analysis
of these experiences, were the specific integrity themes pinpointed. It proved helpful that experiences drawn from the interviews with the directors could be brought into the group sessions because this encouraged people to elaborate and present their own experiences. All cases were written up using the form shown in Table 1.

| Description of the topic: | |
| Date of the group session: | |

| Vulnerability or integrity violations: | |
| Possible causes: | |
| Proposed action for improvement: | |

Table 1: Form used to report cases shared during the group sessions

Phase 3: Discussion of results and integrity management system adjustment
All the case reports were collected by project team members from a third, neutral party to ensure that the cases were reported anonymously. Further, the cases were put into a database in order to cluster the major themes seen in the integrity risks and to analyse the causes of the integrity violations. This approach made it possible to concentrate on real life cases during the group sessions. Only afterwards, in the analyses, were the specific issues with respect to integrity brought to the fore. The outcomes of this analysis were reported and discussed in a joint meeting with the managers of all the participating companies, taking into account the interests of all parties. In this meeting, the proposed actions to improve the situation were discussed, and agreements were made to change both interfirm integrity management systems as well as measures related to the intrafirm level.

This approach enables one to encompass both sides of integrity management as described by Mahoney (1997). He refers to two dominant principles in medical ethics, namely the principles of non-malfeasance and of benevolence. While the principle of non-malfeasance refers to doing no harm, the principle of benevolence reflects actively doing good. Our approach to sharing cases where employees were hindered in working in accordance with the prevailing values could bring forth cases referring either to negative incidents or to actively doing good.

The aforementioned phasing of the project contributed to a clear view of the most important integrity risks. In addition to the methods to be used in the different phases, it was also important that all participants agreed, right from the beginning, on several points:
1. The project would focus on the bilateral relations between ProRail and the engineering firms. Involving other clients or construction firms would make the project too complex.

2. Integrity is part of the identity of an organisation and the way it wants to do business. Therefore, the expected results go beyond managing integrity. It is also about risk control, creating trust and stimulating efficient cooperation between business partners.

3. The investigation of integrity risks would be aimed at both the commitment of top management as well as concrete issues at the project level.

4. In order to obtain enough openness in the discussions on integrity risks it would be crucial to avoid a ‘blame and shame’ culture. The mutual interest in this project focuses on learning from incidents in order to develop and enforce preventive measures in the future and to support each other in stimulating relationships based on trust.

5. An external party, in this case the University of Twente, would gather all the data used in this project and ensure that the cases would only be used anonymously.

6. The project would be guided by a steering committee with members from all the participating companies. The steering committee would delegate operational activities to a project group.

7. Communications about the project with external parties would only be allowed after approval by the steering committee.

Results of the comparison of codes, directives and ambition levels

Although all the participants had drawn up codes of conduct independently of each other, there were no major differences in their intentions. There was particular congruity on the level of value statements, and almost all codes referred to a set of values including:

- Reliability
- Objectivity
- Expertise
- Customer orientation
- Respect

The codes differed in the extent that these values were worked out in concrete norms and guidelines. Also, on the level of the concrete guidelines, there were some differences, for example with respect to the maximum value of gifts or the acceptance of outside activities. Since these differences in operational norms related to the same type of value, it did not seem too much of a problem to tune these differences to each other.

In the interviews, some other differences appeared. Some people saw integrity as more or less compliance with the law, while others stressed that integrity should come from within, based on your personal and organisational values. After a discussion within the steering group all participants agreed to define integrity as “acting in correspondence with the current values and norms of all stakeholders including the associated rules and duties”.

Another important outcome of the interviews was that integrity was primarily seen as a problem of other parties (cf. McEwan, 2001). Most of the managers could recall some examples where the statements in codes of conduct had been violated, but these examples were almost always to do with the behaviour of others. For example, some of the engineering
firms complained about favouritism shown by ProRail during the tendering process, whereas ProRail managers referred to doubts with how the engineering companies respected confidential information. With respect to their own organisations, the general feeling was that only minor, if any, concerns would be expressed during the second phase.

**Analysis of integrity risks**

In the second phase of the project it was up to each company to organise a group session involving some of their project leaders. Some parties delivered their completed report forms quickly. For others it took some time, for example because the pressure of daily activities delayed writing the report. In drawing this phase to a close, it proved to be helpful that a major contractor wanted to make progress with the project and phoned the partners to urge them to send in the completed forms. The outcome was that all participants contributed to the sharing of concrete incidents. Ultimately, this resulted in 131 useable cases where project leaders of either ProRail or one of the engineering firms had experienced integrity risks during their work. These cases were rather well balanced between the seven engineering firms and ProRail, since several divisions of ProRail were involved in the project.
<table>
<thead>
<tr>
<th>No.</th>
<th>Themes</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>What is acceptable when charging costs?</td>
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<tr>
<td>2.</td>
<td>When is protection of interests substituted by entanglement of interests?</td>
</tr>
<tr>
<td>3.</td>
<td>To what extent should you allow a reliable, professional partner to deviate from tendering procedures?</td>
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<tr>
<td>4.</td>
<td>What to do when the interests of your company do not match the interests of your client?</td>
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<td>5.</td>
<td>What to do when optimising the design brings forward non-declarable costs for your own company?</td>
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<tr>
<td>6.</td>
<td>What are the limits of cooperating respectfully?</td>
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<td>7.</td>
<td>Under what conditions can knowledge in advance be combined with fair competition?</td>
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<tr>
<td>8.</td>
<td>What is acceptable when you want to deal carefully with confidential information?</td>
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<tr>
<td>9.</td>
<td>Under what conditions can time pressure be combined with an objective and fair appraisal?</td>
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<tr>
<td>10.</td>
<td>Under what conditions can fair competition be combined with entry barriers in tendering processes?</td>
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<tr>
<td>11.</td>
<td>What to do when your own expertise is called into question?</td>
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<tr>
<td>12.</td>
<td>What are the limits of external communication when you want to be a reliable, independent partner?</td>
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<td>13.</td>
<td>When do gifts affect independency and reliability?</td>
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<tr>
<td>14.</td>
<td>When is it acceptable for a reliable partner to keep silent about mistakes or malpractices?</td>
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<tr>
<td>15.</td>
<td>Under what conditions is it acceptable to engage with partners that are willing to make an offer at an unrealistic price?</td>
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<tr>
<td>16.</td>
<td>To what extent is it acceptable for a professional and reliable partner to deviate from project procedures?</td>
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<tr>
<td>17.</td>
<td>When does communication before the selection of a contracting partner become a preliminary consultation?</td>
</tr>
<tr>
<td>18.</td>
<td>What to do when a hierarchical order violates the code of conduct of your own company?</td>
</tr>
</tbody>
</table>

Table 2: Overview of the themes mentioned during the group sessions

After analysis, the cases were clustered into twenty themes, summarised in Table 2. The eight themes that were mentioned most often were selected for an in-depth analysis. For each of these themes, a general description was created together with some striking quotes, the major causes and the proposed actions for improvement. Based on this description, the project team also formulated guidelines for dealing with these kinds of situations. An example of a theme description is provided in Box 1.
Theme: Under what conditions can advanced knowledge be combined with fair competition?

Fair competition is important for the good functioning of the market. Knowledge held or obtained in advance can corrode fair competition. However, a certain variation in the knowledge known in advance is inevitable due to the histories of the companies involved and the prior involvement of some engineering firms in the development of projects. Therefore the question arises as to when advanced knowledge can be compatible with fair competition?

Example 1: The engineering firm involved in the first two stages of a project will inevitably have more information than other parties interested in executing Stages 3 to 5. Even when the formal documents are made available to all interested parties, the engineering firm involved in the early stages will still have a huge advantage when responding rapidly to a tender offer.

Example 2: An engineering firm involved in the early stages of a project can establish certain requirements in order to create dependencies. This can give the firm a guarantee that the follow-up stages will also be rewarded to them.

Causes of integrity risks

- Especially in times of recession it can be very tempting to ensure that follow-up assignments are also rewarded to your own company
- When the client is content with the work of an engineering firm they have an interest in continuing that relationship. Even if the tendering procedure obliges the client to organise an open competition, it might be tempting to put in certain requirements that gives an advantage to the present firm.

Suggestions for corrective actions:

- Change the system so that engineering firms that are already involved cannot bid for subsequent stages. However, this measure could well have financial consequences because the efficiency will probably be lower.
- Tendering for all the phases (1 to 5 in the example above) in a single procedure. This removes any stimulus to withhold certain information and avoids competitors putting efforts into a tendering process for which they have almost no chance of success.
- Set a minimum period for submitting tender bids. Nowadays, the term is sometimes so short that it is almost impossible to draw up a realistic proposal without prior knowledge.

Box 1: Example of a theme description

The database of cases was also used to analyse certain other characteristics of integrity management. One of these characteristics was the degree of reflection on one’s own behaviour. In this respect, it was noteworthy that two companies reported only cases that concerned the behaviour of others. The remaining companies had more balanced reports, with from 20% to a maximum of 70% of the cases relating to their own questionable behaviour.
Another part of the analysis focused on the values that were challenged by the reported cases. For some cases this was difficult to define, because they challenged several values, and so these cases were not included in this analysis. The remaining cases were broken down as follows:

- Cases challenging *objectivity*: 30%
- Cases challenging *expertise*: 29%
- Cases challenging *customer orientation*: 15%
- Cases challenging *reliability*: 10%
- Cases challenging *respect*: 9%
- Cases challenging *confidentiality*: 5%
- Cases challenging *social engagement*: 2%

Another analysis looked at the phases of the project where these problems had arisen. For this a distinction was made between the tendering phase, the design phase, and the project execution phase, and cases could also be related to the whole project. It transpired that the tendering phase was especially prone to integrity risks. An overview of the results is given below:

- Number of cases related to the *tendering phase*: 51
- Number of cases related to the *project execution phase*: 24
- Number of cases related to the *design phase*: 21
- Number of cases related to the *whole project*: 33

The final part of the analysis was related to the proposed actions for improvement. Although these suggestions are more meaningful when they are related to specific themes, summarising them on a more general level creates insight into the areas identified for improvement. This results in the overview presented in Figure 1.
Figure 1 shows that drawing up new rules, sometimes seen as the core of an integrity management system, was only considered appropriate in 6% of all cases. Much more important seems to be improving and clarifying the quality of the existing rules, sometimes because they seem to require contradictory behaviour by employees. The other major area suggested for corrective action concerns stimulating dialogue when incidents occur or seem likely to occur. A particular need for direct dialogue with business partners was mentioned several times as a way of dealing with integrity risks (21%). Further, in 8% of all cases, dialogue with one’s own colleagues and supervisors was proposed as a way of resolving the issue.

Adjusting integrity management systems

The report on the analyses of integrity risks was discussed in a meeting of the steering group. The first point of note is that most members of the steering group were surprised by the wide gap between the perceptions of top managers and the experiences lower down. This surprise was generally interpreted as stressing the added value of a project where integrity is linked to operational risks. On the one hand, it might seem odd that parties working with each other for years did not share these risks before. On the other hand, being open about these risks in a reasonably safe environment removed an obstacle in the relations between ProRail and the engineering firms, resulting in a more open climate in which to share future incidents.

Furthermore, the steering group agreed upon several corrective actions that were partly related to the individual organisations as well as to stimulating an ongoing dialogue between ProRail and the engineering firms, namely:

- Rules are well known, but the wording of the rules allows too much room for interpretation and needs to be improved
- Employees need greater support in putting integrity policies into practice. This requires strong leadership in support of the prevailing values
- Setting up an intra-organisational contact point to report violations
- Using the cases and the communication guidelines and training sessions within each of the participating organisations
- Ongoing evaluation process grounded in a periodic meeting of all partners

Conclusions and recommendations

The research project conducted by ProRail and the engineering firms shows the value of turning integrity into concrete examples and practical guidelines for the relations between engineering firms and their clients (see table 3). It is easy to formulate desirable values, but these only gain meaning if they are related to operational activities and really become part of the identity of an organisation (Collins and Porras, 2000). The integrated approach, where the aspirations of participating companies were linked to the empirical conditions and behavioural antecedents, proved to be a successful approach. It was successful both in the sense that integrity policies could be matched with compliance in practice, and in stimulating a climate where issues could be openly discussed as they occur.
Guidelines which came out of the project

**What is acceptable when charging costs?**

It is expected that reliable business partners should always keep to contract agreements. Ambiguities should be discussed openly in order to come to supplementary agreements.

**When is protection of interests substituted by entanglement of interests?**

Entanglement of roles is not acceptable when this might result the prejudice of one’s own functioning or the functioning of the organisation. Not is it acceptable when it might give the impression that a privileged position has been acquired in business relations.

**To what extent should you allow a reliable, professional partner to deviate from tendering procedures?**

It is expected from a reliable, professional partner that:

- Contracting occurs in compliance with principles of fair competition
- The applicable regulations are followed
- There is no possibility of influence by favours
- All parts of the contracting process can be justified

**What should you do when the interests of your company do not match the interests of your client?**

The interest of the client has precedence over the interest of the contracting firm. In the short term, it might seem advantageous to choose for the interest of your company, but in the long term the unconditional serving of the clients interest is also in the interest of your company.

**What should you do when optimising the design brings forward non-declarable costs for your own company?**

It might be expected from a reliable contracting partner to strive for a result that is best from a long term perspective. At the same time the relations between a client and a contracting firm has a commercial side, so it should be possible to make agreements for compensation of complementary activities.

**What are the parameters of respectful co-operation?**

Cooperating respectfully implies that personal convictions and characteristics are respected in order to prevent needless harming of business partners.

**Under what conditions can advance knowledge be combined with fair competition?**

The use of advance knowledge is counter to fair competition when this results in a situation where other tendering parties do not have a real chance or when the knowledge is not used in the interests of the client.

**What is acceptable when you deal with confidential information?**

Careful handling of confidential information requires the prevention of the information being made available to others when this can result in harmful consequences for the client or other parties.

*Table 3: Practical guidelines for the most relevant integrity dilemmas*
Another striking conclusion relates to the gap between the perceptions of senior management and the reality of experiences within their organisation. Especially in sectors like the construction industry, where the primary process takes place in projects, it is crucial that integrity management is not restricted to the boardroom. For many people working in the construction industry, their commitment, guiding values and their view of leadership is primarily related to the projects that they are working on. Therefore, a successful integrity management system in the construction industry has to encompass this and also influence the informal systems and cultures that guide behaviour within projects (see also Driscoll and Hoffman, 2000; Paine, 1994).

A third conclusion focuses on the content of the major dilemmas that were revealed during this research project. Despite the well-publicised incidents in the Dutch construction industry, there were only a few cases reported that related to hotly-debated issues such as price-fixing (cartels) and gifts. Rather, the majority of cases had to do with the tendering process and with the less than careful treatment of assets such as information, goods and financial resources during the execution of projects. As a consequence, integrity management will also have an impact on more general management issues such as risk control and efficient cooperation between business partners.

This research project has some implications that are relevant for other parties interested in enforcing an integrity management system. The first recommendation reflects the setting of this project. It proved to be valuable that the client and some of its contracting parties executed the project together (see also Hardy and Phillips, 1998). This is, to an extent, because most instances of deviant behaviour within an organisation were only reported by employees from other organisations. However, the interconnectedness of deviant behaviour, its antecedents and consequences frequently cross the borders of an organisation. Therefore, a sharing integrity risks between business partners is to be preferred over discussions within a single company.

Another recommendation has to do with caution in picking up the concrete results of this project. It might be tempting to use the overview of integrity themes as a starting point for integrity sessions in other organisations. A danger of this approach is that the real issues in the specific context of another organisation may only partially be related to the overview presented in this article. Therefore it is our recommendation not to use the list, but rather to use the methodology presented in this paper. Organising group sessions with participants from your own organisation and related business partners provides the greatest likelihood that the real and pressing issues, as experienced by your employees, are taken as the foundation for stimulating integrity management.
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