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Abstract

Purpose of the article The traditional idea of risk management is continually evolving as it enjoys growing popularity in corporations. The paper reviews the risk management procedure within the traditional concept and then identifies and discusses the main trends currently observed within the organisation and implementation of this procedure.

Scientific aim The paper aims at identifying and describing the currently observed trends in the evolution of risk management process. To achieve this, it aims at comparative analysis of solutions within traditional risk management concept and the ideas underpinning the current process of risk management standardisation. It also aims at reviewing the validity of classification of risk treatment techniques.

Methodology/methods The paper represents a conceptual analysis of the current state of affairs and uses the method of comparative analysis and deduction based on the literature review and the lecture of standardisation documents. As a viewpoint paper, it represents author’s own ideas and findings.

Findings The two main trends of risk management evolution should be identified. The first one is related with strategic dimension of risk management as this procedure is often promoted as an integrated concept. It springs from the regulations of standardisation procedures which aim at unifying the terminology and set of activities from practitioners’ perspective. The second direction of risk management concept evolution is observed within the development of risk financing techniques due to the innovations observed within traditional risk retention and transfer solutions, as a result of continuous convergence of insurance and capital markets.

Conclusions (limits, implications etc) The risk management process is constantly evolving toward the strategic dimension as the risk perception changes, concerning both the downside and upside of risk. However, the standards follow similar sequence of activities as compared to the traditional concept and just redefine the tasks performed in each step. The evident evolution is observed within risk financing tools due to the implementation of innovative solutions.

Keywords: Risk management, risk management standards, enterprise risk management, risk financing, alternative risk transfer

JEL Classification: D8, G32
Introduction

Nowadays, companies operate in constantly evolving surrounding, which raises the number of their risk exposures. That is probably one of the reasons why corporations are growingly interested in managing risk. Traditionally, the model of corporate risk management procedure was focused on identifying risk exposures, measuring their impact on a company and applying the best methods of handling risk, with particular focus on insurance.

The solutions within traditional concept of risk management are constantly evolving. Therefore, the paper aims at identifying the current trends observed within this evolution. In particular, it aims at supporting the following hypotheses:
1. the first area of risk management evolution is connected with the evolution toward a strategic dimension of the risk management tasks as compared to the traditional concept,
2. the second area of risk management evolution is connected with the innovations in risk financing tools, which results from the continuous convergence of insurance and capital market and the integration of advanced financial instruments with traditional insurance concept.

In order to give a support to these hypotheses, the study implies the method of deduction and conceptual and comparative analysis of the current state of affairs, currently available literature and the ideas of standardisation documents. The risk management standards are documents promoted by associations practically involved in risk management issues. Although these standards have often a general dimension, the ideas included can be easily transferred to the corporate dimension. As the problem of risk financing tools is extensive, the paper gives just a sense of innovations that spread in this field and mentions main available solutions worth to be considered from a corporate perspective.

This paper constitutes original piece of work as it presents the author’s own ideas and findings constituted by the identification and characteristic of two trends of the risk management evolution. The structure of the paper is as follows. Section 1 discusses the model procedure of risk management within the traditional concept. Section 2 gives a sense of general trends in risk management concept evolution. Section 3 describes the evolution toward the strategic dimension of risk management and its standardisation whereas section 4 discusses the evolution within the extension of risk financing tools. Section 5 provides concluding notions.

1 The model procedure of risk management within the traditional concept

Risk management is usually defined as the procedure aiming at identifying, measuring and treating of exposures to potential accidental losses (Williams and Heins, 1989, p. 4). This procedure is believed to be directed toward company’s main goal which is nowadays associated with the multiplication of the owners’ wealth (Neale and McElroy, 2004, p. 7, 10; Baker and Powell, 2005, p. 11; Arnold, 2002, p. 11-12). Undoubtedly, a properly conducted risk management procedure helps to achieve this goal in numerous ways. It applies company’s operations following the loss (it means post-loss) or prior to a loss (it means pre-loss). In the post-loss context, risk management helps to keep costs below a threshold beyond which they could threaten the continued survival of the company. Also, it helps to achieve earnings stability, which means limitation of unforeseen reductions in earnings or cash flows caused by losses to “acceptable” amounts. This is possible because risk management helps to assure the continuity of operations, which means resuming normal business operations with minimum delay following a loss. As a result, risk management helps a company to grow continually. In the pre-loss context, risk management increases value through keeping total risk management costs to the lowest practical level. Also, it helps to build corporate social responsibility (Williams and Heins, 1989, p. 21-22).

The awareness of the risk management functions on pre- and post-loss basis is needed for a few reasons. First of all, it gives a sense of the ways in which a good risk management may support company’s operations. Secondly, it helps to understand that the risk management objectives should be coherent with the primary goal of company’s existence. It is recommend-
Traditionally, the risk management procedure includes a few clearly defined steps, with two fundamental stages: risk analysis and risk treatment, as presented on Figure 1 (Williams and Heins, 1989, p. 18).

The procedure should always begin with a clear definition of risk management objective. As mentioned above, this objective should correspond to the main goal of company’s activity. Then, the risk identification stage should be conducted. This stage includes:
1. identification of loss exposures,
2. measurement of potential losses.

The identification of loss exposures is perhaps the most difficult function that the risk manager must perform. If the company fails to identify the exposures, it will have no opportunity to deal with unknown (unidentified) exposures efficiently. Here the different techniques might be applied (e.g. check lists, decisive trees) (Chapman, 2006, p. 128-135). The next step within risk analysis is the measurement of the potential losses during the budget period associated with the identified exposures. The risk measurement process includes:
1. a determination of the probability or chance that the identified exposures will cause the loss – the loss frequency,
2. a determination of the impact of these losses on the financial stability of the company – the loss severity.

Loss frequency and loss severity may be assessed with both quantitative and qualitative techniques. The properly conducted risk measurement indicates the risk exposures that require a closer attention, which is often depicted with the help of so called “risk matrix” (Baranoff, 2004, p. 49). This step aims at identifying the most serious risk exposures that can threaten company’s financial stability.

The risk treatment stage requires the selection of the best combination of tools that can be used to handle the risk. The decision is backgrounded by appropriate risk analysis. Traditionally, risk treatment techniques are divided into two major groups, as presented on Figure 2.
The company may avoid an identified risk exposure. Risk avoidance is here perceived as the avoidance of the activity raising the risk, which is recommended only for the high-frequency and high-severity exposures. The company may also reduce the frequency or severity of risk exposures by application of risk prevention or risk repression tools. The above mentioned tools belong to so called physical risk control techniques. Another company may transfer the risk on another entity or retain the risk which means that it will finally. It is important to mention that the company should select the best combination of available risk management tools. It is a difficult task and depends on numerous issues, e.g. the company’s ability to assess and identify the risk exposures properly or the acceptable cost of risk management. However, the risk management tools should never be perceived as substitutes, but as complementary tools.

The last step in the risk management procedure is related to the implementation and monitoring the whole procedure. The implementation is related to the decision among risk tool alternatives. The monitoring is focused on assessing the wisdom of the decisions taken. The constant company’s surrounding changes create the need for reconsideration of the currently conducted procedure and implementation decisions.

2 The general trends in risk management concept evolution

The above presented model of corporate risk management procedure is associated with the traditional one. As the trend for managing risk is spreading among companies, the process is often subject for modifications. This can be perceived as the proof of constant evolution of corporate risk management ideas. The key concept of the process remains unchanged as it follows the same sequences of activities. However, the scope of particular steps is often redefined.

A traditional concept of risk management is focused on safety of the company and often is associated with the problem of proper insurance program construction. Also, one may point that it does not promote risk management as an integrated concept. Usually, the risk management is addressed as a risk manager function, although it is recommended to conduct the risk identification with the active participation of all business units.

The evolution of risk management concept is primarily concerned with an extended risk definition. Risk is perceived not only as a threat (downside), but also as an opportunity (upside). The process is addressed not only to protect the company, but also to allow its growth. Such assumption automatically turns the focus of risk management toward the strategic issues. Therefore, the risk management process requires an integration of all company’s activities and units.

In Europe the evolution of risk management concept toward its strategic dimension was probably initiated by the report known as The Turnbull Guidance (or Turnbull Report), issued in 1999. This report raised a need for integrating the internal auditing with risk management procedure The Financial Reporting Council, 2005, p. 3). The Institute of Chartered Accountants in England and Wales (ICAEW) issued the guidance on the implementation of Turnbull recommendations. The guidance classified risk into five main categories –
The Turnbull Guidance laid the foundation for the risk management standardisation, which constitutes a further step in risk management evolution. The standardisation is promoted by associations dealing with risk or risk related issues and aims at explaining the process for practitioners (and practical applications). The need for standardisation appeared with the growing interest on risk management implementation, which caused that numerous views and descriptions were used. Standardisations aim at using an agreed terminology, unifying the risk management process in the context of its organisation and objectives. In particular, two standards gained a wider acceptance – “A Risk Management Standard”, issued in 2002, and “Enterprise Risk Management – Integrated Framework”, issued in 2004. However, there are examples of other standardised guidelines for managing risk (Moller, 2007, p. 331-343).

Another direction in risk management evolution is concerned with the development of risk treatment techniques. A more and more advanced tools are being available for companies with the extension of financial market innovations. This caused that main tools of financial risk control are being integrated and the traditional distinction (presented on figure 2) is no longer valid.

The two main areas of risk management evolution will be developed further in the paper accordingly with the idea framed on the Figure 3.

Within the evolution toward strategic dimension of risk management and its standardisation, the most popular European risk management standards will be reviewed in the context of their similarities and differences as compared to traditional concept. Within the evolution related to extension of risk management tools, the innovative risk financing tools will be closely presented.

3 Evolution toward the strategic dimension of risk management and its standardisation

3.1 A Risk Management Standard

“A Risk Management Standard” is a document published in 2002 by the three major risk management organisations in United Kingdom: The Institute of Risk Management (IRM), ALARM The National Forum for Risk Management in the Public Sector and The Association of Insurance and Risk Managers (AIRMIC).

“A Risk Management Standard” is constructed under the assumption that risk has both an upside and a downside. It is based on the terminology coherent with the one used by the International Organisation for Standardization (ISO) in ISO/IEC Guide 73 Risk Management – Vocabulary – Guidelines (AIRMIC, ALARM, IRM, 2002, p. 1).

“A Risk Management Standard” states that “risk management is a central part of any organisation’s strategic management” and “it should be a continuous and developing process which runs throughout the organisation’s strategy and the implementation of that strategy” (AIRMIC, ALARM, IRM, 2002, p. 2). This definition clearly states that risk management has a strategic dimension and should be a continuous part of company’s operations.

The standard extends traditional stages of risk management procedure. This extension leads to closer definition of tasks that the company should undertake within each stage of risk.
The risk management process, presented on Figure 4.

As within a traditional view, the process should begin with the analysis of company’s objectives, here particularly addressed to strategic ones. The risk assessment stage consists of risk analysis and risk evaluation which is coherent with the risk identification stage within traditional concept. However, the standard promotes separately the risk description step, which is designed to display the identified risks in a structured format (e.g. a table). The standard gives also a few practical instructions within risk estimation. The consequences of threats and opportunities should be considered with regard to their impact on (a) company’s financial situation, (b) company’s strategy and operational activities, and (c) stakeholders concern. This reflects in a visible way the strategic concept of risk management promoted by this standard.

The risk evaluation step extends the risk analysis and recommends comparing the estimated risks against risk criteria which the company has established. Therefore, the risk evaluation step helps to define the signficance of risk to the company and whether the risk should be accepted or treated.

“A Risk Management Standard” adds also a step related to risk reporting and communication. This is related with providing the information about the results of the risk management process on different levels within the company and adjusted to these levels needs. The risk treatment step corresponds with the traditional concept as it constitutes a process of selecting and implementing measures to modify the risk. The model risk management process ends with the monitoring and review of the whole procedure which gives recommendations for improvements in the whole process (on each step).

As the standard promotes the strategic dimension of risk management process, it gives recommendations for structure and administration of the process. It discusses briefly the risk management policy framework that the organisation should define, as well as the role of the board, the business units and internal audit.

3.2 Enterprise Risk Management

Enterprise risk management (hereafter: ERM) is often called a holistic risk management
and is considered to be the most recent expansion of risk management idea (Baranoff, 2004, p. 58; Chapman, 2006, p. 4). ERM is a result of surveying the whole spectrum of all company’s risk exposures, regardless if they are insurable or not. It represents an integrated approach to managing risk and aims at making appropriate corporate level choices for solutions in mitigating risk.

ERM concept is also a subject of standardisation. In 2004 The Committee of Sponsoring Organizations of the Treadway Commission (hereafter: COSO) issued a document clarifying the enterprise risk management standards, entitled “Enterprise Risk Management – Integrated Framework”. COSO is a voluntary private sector organisation comprised of the following professional associations: American Accounting Association (AAA), American Institute of Certified Public Accountants (AICPA), Financial Executives International (FEI), Institute of Management Accountants (IMA), and the Institute of Internal Auditors (IIA). COSO is known worldwide as an organisation providing guidelines concerning financial reporting, corporate governance, business ethics, risk management and internal control, among other issues (www.coso.org).

According to the COSO’s standard, ERM is defined as “a process, effected by an entity’s board of directors, management and other personnel, applied in a strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives” (COSO, 2004, p. 2). As a consequence, COSO’s ERM framework represents another standard recommending the integration of risk management process at every level of the company. Also, it points at the need for continuity of the process and its application in strategy setting.

However, the COSO’s ERM framework visualises the whole procedure in a different way than in the traditional risk management concept or in “A Risk Management Standard”. COSO’s ERM framework presents the three dimensional model of risk management, which aims at underlining the integrative nature of the whole process. The three dimensions of COSO’s ERM Framework include: (1) organisational objectives, (2) management operations, and (3) entity units. The vision of integrated, holistic ERM procedure was presented by COSO in a form of a cube, which strengthens the sense of integration of each managerial dimension (Ong, 2006, p. 398). Figure 5 presents a simplified vision of COSO’s cube.

The entity’s objectives comprise of four categories:

a) strategic – the goals aligned with and supporting entity’s mission,
b) operational – related with the effective and efficient use of entity’s resources,
c) reporting reliability,
d) compliance with applicable laws and regulations.

The management operations dimension consists of eight interrelated components, which are similar to the steps introduced within traditional risk management concept. These components include:

a) internal environment, which under-pines the basis for risk management philosophy and risk appetite, as well as the integration of the risk management process within the organisation,
b) objectives setting, which recommends the alignment of ERM with entity’s mission and coherence with the defined risk appetite,
c) event identification – which coincides in many respect with the risk identification in traditional risk management concept,
d) risk assessment – which coincides in many respect with the risk assessment in traditional risk management concept,
e) risk response – which promotes risk treatment techniques known in traditional approach,
f) control activities – which is focused on assessing whether the risk response was introduced properly,
g) information and communication – similarly to “A Risk Management Standard”, it promotes the communication of the ERM process in the broad sense, following down, across, and up the entity,
h) monitoring – which aims at supporting the needed modifications, similarly to the traditional and “A Risk Management Standard” concepts.
The third ERM dimension – entity unit – specifies the meaning of ERM holistic approach as the process should be conducted and communicated at (a) entity-level, (b) divisions, (c) business units and (d) subsidiaries.

Within the ERM concepts, other less-known standards are being promoted. The RIMS, which is a not-for-profit organisation dedicated to the advancing the practice of risk management, published in 2006 the “Risk Maturity Model (RMM)”. The model promotes the same ideas as “A Risk Management Standard” and COSO’s ERM framework. However, it is even more advanced in addressing risk management to the managerial and strategic aspects (Fox and Epstein, 2010, p. 4). It is also worth to mention, that the current discussion in this field is concerned mainly with the role of board of directors in the risk management procedure (Fraser and Henry, 2007, p. 393).

3.3 Business Continuity Management

Business Continuity Management (hereafter: BCM) is a standard issued by the Business Continuity Institute in 2007. It represents a holistic management process that is focused on identifying and treating events that can threaten the organisation’s survival. Simultaneously, it gives recommendations for an effective response to such events that should safeguard the interests of all organisation’s stakeholders as well as its reputation and value creation process.

At first glance the BCM concept may seem remote from traditional risk management concept concerning its main goal. However, it represents an integrated process of managing the downside of risk with particular focus on risk that can endanger the continuity of activities. BCM is therefore somehow specialised in one type of risk – the risk of survival and thus develops a highly advanced managerial procedure for treating this specific type of risk.

The authors of the BCM underline that it is different from traditional risk management concept (see Figure 6). A closer analysis of their statement, however, convinces that in numerous fields both concepts are similar and coherent. The core determinant that diversifies traditional and BCM concept lies in the type of risk on which BCM is focused. The further differences, concerning the method, parameters, scope and intensity of events, are a consequence of the risk in focus.
Risk Management

Business Continuity Management

<table>
<thead>
<tr>
<th>Key Method</th>
<th>Risk Management</th>
<th>Business Continuity Management</th>
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<tr>
<td>Key Parameters</td>
<td>risk analysis</td>
<td>business impact analysis</td>
</tr>
<tr>
<td>Type of Incident</td>
<td>impact &amp; probability</td>
<td>impact &amp; time</td>
</tr>
<tr>
<td>Size of Events</td>
<td>all types of events</td>
<td>events causing significant business disruption</td>
</tr>
<tr>
<td>Scope</td>
<td>focus primarily on management of risks to core business objectives</td>
<td>focus only on incident management mostly outside the core competencies of the business</td>
</tr>
<tr>
<td>Intensity</td>
<td>all from gradual to sudden</td>
<td>sudden or rapid events</td>
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**Figure 6** A comparison of traditional risk management concept and business continuity management


The BCM procedure is in many fields coherent with the traditional concept and the above presented risk management standards, as presented on Figure 7.

The process begins with the understanding of the organisation, then determining the BCM strategy, followed by the BCM response which is a substitute of risk treatment step, ending with exercising, maintaining and reviewing the whole procedure. The BCM guidelines also promote embedding the process in the organisation’s culture. The distinctive differences can only be observed within the BCM response. Here, instead of particular risk management tools, the BCM recommends specified plans (The Business Continuity Institute, 2007, section 4, p.7,13,16): a) the Incident Management Plan (IMP) – the purpose of the IMP is to provide a documented framework to enable organisation to manage any crisis event, regardless the cause,
b) the Business Continuity Plan (BCP) – the purpose of the BCP is to provide a documented framework and process to enable the organisation to resume all of its business process within; it will always contain assumptions about the maximum scale of the event (in terms of its duration and extent),
c) Activity Response Plan (ARP) – the purpose of the ARP is to cover the response by each department or business unit to the event.

The BCM process is perceived as a holistic managerial process. This convinces that the evolution of risk management concept can be directed toward the separate philosophy of running the business. However, for the entities which are not focused only on the downside of risk, the BCM gives useful guidelines for developing traditional risk management concept within the loss treatment problem. BCM represents a structured procedure useful particularly for managing the high severity and low-frequency risks.

4 The evolution within the extension of risk financing tools

As mentioned above, another important trend observed within the evolution of risk management concept is related to the extension of risk financing techniques. This is a consequence of the constant evolution of financial markets, as well as the changes of insurance market conditions. It is worth to mention, that these changes are also listed as a reason for ERM concept development (Baranoff, 2004, p. 59).

Due to the currently observed changes of available risk financing tools, a traditional classification (presented above on figure 2) needs to be redefined. The main reason is the evolution of so called alternative risk transfer (hereafter ART) instruments that often combine traditional risk transfer with risk retention. Figure 8 presents a modified vision of risk financing tools classification, which reflects more accurately the current trends in risk management solutions.

As presented on figure 8, the current concept of risk management should include a new-class of instruments, which form a combination of risk retention and risk transfer mechanisms. These instruments are often referred to as the ART (Alternative Risk Transfer), as they form alternative solutions against the traditionally understood financial risk control tools. Figure 8 presents only these of ARTs which are available for companies. However, the number of ARTs is growing constantly and in the future new opportunities might be available for companies.

ART instruments are usually defined as customised structures combining risk retention with risk transfer for a multi-line and multi-year cover (Swiss Re, 2003, p. 16). ART instruments were primarily designed to facilitate so called “uninsurable” risk, which means the risk impossible to be covered on the insurance market or the risk for which insurance premiums were too high (Hartwig and Wilkinson, 2007, p. 925; Swiss Re, 2003, p. 23). Currently, ARTs often
purposefully integrate coverage against insurable and uninsurable risk. Thus, these instruments promote an interesting alternative to traditional insurance, especially with regard to the cost of their application.

As mentioned above, from different ARTs solutions, a few are applicable for companies. Among them are: multi-risk products, finite risk programs, captives and contingent capital facilities. The ideas underpinning these instruments were born on the reinsurance market, thus they are considered as advanced risk financing mechanisms.

Multi-risk products combine the coverage of various risk exposures into one single contract between the company and its insurer. As a rule, such contracts are multi-year. Multi-risk products aim at lowering the cost of traditional risk transfer due to the joint probabilities of risk exposures. The two broad classes of multi-risk products exist (Swiss Re, 1999, p. 24; Banks, 2008, p. 105-108):

a) integrated multi-line and multi-year products (MMPs), which combine a company’s risk portfolio (including both insurable and uninsurable exposures) into a single, multi-year policy, with aggregated premiums, deductibles and policy caps,

b) multi-trigger products (MTPs) which give a coverage in case of simultaneous occurrence of two (or even three) predefined triggers.

Finite risk solutions, from a company’s perspective, are similar to the economic reserves of capital. Such solutions form a defined program of gathering capital for covering losses, controlled and safeguarded by the insurer as a contract partner. Finite risk solutions possess a few distinctive features. As the name says, these solutions are finite (limited) due to the limited assumption of risk by the insurer. Capital gathered in the finite risk program is invested, and the investment income is included to the amount of capital gathered. Depending on the attitude and circumstances of gathering the capital reserve, these solutions might be constructed on the retrospective (it means post-loss) or prospective (pre-loss) basis (Banks, 2008, p. 71-75; Culp, 2006, p. 556-560).

Captives are probably the most widely known form of ART, as they represent the oldest innovation in this field. Captive is an insurer (or reinsurer) organised by the company itself, and dedicated to issuing policies covering the company’s risk (directly or indirectly). It simply means that the captive sole or major customer is the company that founded this captive (Rejda, 2001, p. 48). The idea of captives is evolving, as it wins growing popularity among companies. The above conducted conceptual

5 Concluding notion
The risk management concept is constantly evolving, as it wins growing popularity among companies. The above conducted conceptual
and comparative analysis, based on literature review and the solutions included in the three leading risk management standards, lent support to the thesis, that risk management concept evolves toward strategic dimension. This observation is followed by the changes in risk perception directed toward both the downside and upside of risk, the risk management concept evolves toward strategic dimension. Most of the recently observed ideas in risk management concept highlight the need for treating risk management from a managerial perspective and unifying it with internal control procedures. Consequently, these concepts call for integrating risk management tasks within the company as a whole with the involvement of each of a company’s business units.

In the evolution toward the strategic dimension, the standardisation process plays an important role. As it aims at unifying the risk management vocabulary and tasks, it helps to understand the procedure by practitioners. However, the standards often argue about the role of management in organisation and implementation of risk management. It should be stated. However, that risk management standards are closely related to the traditional risk management concept. They follow the same sequences of activities. Therefore, they can be perceived as sub-types of traditional approach. In fact, the associations related to risk management issues promote their own models of risk management procedure. From a theoretical point of view, they are not revolutionary concepts.

References

The conceptual analysis of the currently available risk financing tools gave a support to the second thesis that the innovations embodied in the form of ARTs spring from the convergence of insurance and capital markets and products. This forms a convincing evidence of another visible course of risk management evolution. Thanks to the creation of innovative risk financing tools, the companies may extend their risk handling programs, concerning the extent to which their financial situation allows to implement instruments combining risk retention and risk transfer.

It is recommended to conduct further researches in the field of risk management standards in order to highlight the specifics of each standard and recommended areas of its applications. The analysed risk management standards seem to be closely related to the traditional risk management concept. Although they promote originality, they follow the same sequences of activities. Therefore, they can be perceived as sub-types of traditional approach. In fact, the associations related to risk management issues promote their own models of risk management procedure. From a theoretical point of view, they are not revolutionary concepts.

Further inquiries should also be conducted to explore the awareness and availability of the ARTs among corporations, especially in the countries with the lower level of capital market development. In particular, it is recommended to examine whether companies are interested in such innovative solution as well as if there are no legal constraints.


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Doručeno redakci: 30.9.2010
Recenzováno: 8.5.2011
Schváleno k publikování: 30.5.2011