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PREFACE TO SUSTAINABLE DEVELOPMENT PROBLEMS IN THE ISSUE

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Sustainable development requires economic, environmental and social policies to be designed and implemented in a mutually reinforcing way. This implies a need for new management thinking to improve policy coherence and to increase the role of knowledge in the formulation and implementation of policies as well as improve communication with civil society and business. Sustainable development should be not considered as an additional requirement but an overarching principle, which governs the development processes.

Sustainable development is associated with the processes of long–term human activities development ensuring the harmony of social, economic, and ecological equilibrium. The risk arising after violating the principles of sustainable development is of every possible kind and sometimes is hardly conceivable in present situation. However, the consequences of unsustainable human activity hurt the human being ever more badly and may influence the survival of future generations.

The goals of development of the states situated near the Baltic Sea follows up the goals of Agenda 21, in which the most important features and requirements of sustainable development were summarised: to establish conditions for all inhabitants to set up accommodation; to improve administration of populated localities; to support sustainable planning and management of earth usage; to take care of integrated supply of infrastructure for environment, for example, water supply, engineering equipment, sewage, waste collection; to develop sustainable energy and transport systems inside inhabited localities; to ensure planning and management of places for living in vulnerable territories; to promote sustainable construction industry; to create healthy environment in the city.

The principles of sustainable development consist of a lot of components and make up a totality of requirements that can be presented as standards, permission for functioning, taxes for cause pollution etc. These principles give rise to a very important problem of legal regulation, the significance of which and relation to the legal system. The proper selection of novel work organisation methods, knowledge management systems, modern information–communication technologies, and up-to-date methods of their control as well as the skills of their

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mastering allow us to realise the sustainable development problems of organisations more efficiently and to support new organised Master studies.

This issue contains selected papers of the 4th International Conference "Citizens and Governance for Sustainable Development (CIGSUD)", Sept 28–30, 2006, Vilnius, Lithuania (*http://www.mii.lt/cigsud*). The scope of the conference was to encourage and facilitate interdisciplinary communication, placing emphasis on those areas that will provide the most benefit for appreciating the state-of-the-art sustainability methodology, and tracking links for knowledge-based and economic technologies.

The conference becomes an efficient dialogue between researchers, politicians and the public and business sectors with a hope to encourage the integration of economies, ecology, management and social policies into a interdisciplinary branch aimed at developing a sustainable world. CIGSUD continues the series of Vilnius Conferences on Sustainable Development: System Approach to Sustainable Development" (Sept 25–28 1997, Palanga, Lithuania), "Sustainable Development in the Information Society" (Oct 2–4 2000, Vilnius, Lithuania, *www.mii.lt/SDIS*), "Sustainability Indicators and Intelligent Decisions" (Oct 9–11 2003, Vilnius, Lithuania, *www.mii.lt/SIID-2003*).

The papers are selected according to the following topics to familiarise ourselves with the trends and to work towards a common attitude with respect to: development of governance patterns to achieve sustainable development; mobilising citizens and businesses for sustainable development; information communication technologies for a sustainable development; new approaches to risk management, and un-sustainability recognition; intelligent decision support in assessing sustainable development; changes of values towards a sustainable development.

The topics of papers are diverse and include modern development of geographical information systems for decision-making to achieve sustainable development, ethical aspects of sustainable development, applications and methods of information communication technologies, new approaches to risk management, aspects of economics, un-sustainability recognition, intelligent decision support in assessing sustainable development, globalisation and cultural identity issues.

Much attention was paid to the methodology of sustainable land use system adopted by the documents of regional space planning. The structure of the concept includes determination of problem areas, formation of integrated spatial framework with localised functional priorities and regional regimes and organisation of spatial regional policy. The main spatial axes – urban and nature frames, as well as recreation or conservation belts are the integrated components of sustainable spatial structure of a region. Regional policy making could be organised by constructive, conservative and temperate scenarios, what is the prerogative of regional officials.

Geographical information electronic training initiatives for national spatial data infrastructures are included as important topics. National and regional geographic datasets with derivative spatial analysis techniques are often useful for decision-making in sustainable development for both developing and developed countries. Handling and efficient use of geographic data requires rather specific skills. However, the existing curricula are inconsistent and hardly match even the basic needs of geographic information managers in state institu-

tions and municipalities. The main objective of the proposed geographic information e-training system is to develop and provide the modularised spatial information infrastructure courses intended for on-line based learning.

The modern, dynamic lifetime determines rapid cultural changes and multilateral influence of one culture on another and has significant impact on implementation of sustainable development principles. With reference to the accumulated theoretical and practical material, evaluating the principles of sustainable development implementation and the systems of ethical behaviour, the further perspectives of sustainable development in the ethical plane in Lithuania are analysed.

Quality management systems became more important in developing kinds of works and production in organisations. During the last decade there has been a growing recognition that quality does not result from simply imposing rules, but forms the need for organisations to create and maintain an environment in which people are motivated to do the right things without having to be told. The best ways of implementing important standards of quality management and the problems of implementation of recommendations of the International Standard Organisation are analysed. The organisation has been replaced by eight quality management principles that aim to help organisations achieve sustainable success.

The problems of environment protection are related with qualitative recognition of information and possibilities of detection of abnormal situations. The water management and quality treatment is one of important problems related to environment and sustainability. Water has relation to all cycles of biological life. Introduction to intelligence decision support for environment protection research area takes possibilities to understand new information technologies and web service development techniques. The infrastructure of such kind decision-support systems are described by solving the problems for recognition of situation for water treatment and evaluation. The described information technologies and water resource management information system is developed under the EU Water Framework Directive.

Some methodological issues of virtual modelling enabling to raise certainty of development models of the country are analysed as well. Theoretic decisions of strategic self-management enabled to synthesise purposive homogenous model of strategic self-management of the State, the implementation of which could give a substantial push for decision accumulating problems of governance. This decision is related to implementation of self-organisation in each level of governance on the ground of natural strategic self-management cycle. The strategic self-management of enterprises, economy branches and the State are being modernised on the ground of this model. The decisions of sustainability culture improvement in maritime and energy economies, problems and results of its implementation are presented.

The problems arising in the implementation of the sustainable decision strategy, as innovative and effective financial instrument for investors and stock treasury, are analysed. The development of the conception of sustainable decision strategy on capital and money markets involve new techniques and methods of modelling the investment decisions along sustainable management on capital and money markets. The research was performed with an experiment in FOREX and on some matured and emerging capital markets. The adequate for investments decisions reliability assessment portfolio will be presented and analysed as main instrument for developing sustainable investment decisions strategy. Some cases of practical implementation of adequate portfolio are described multi-dimensionally.