A thesis submitted to the Department of Environmental Sciences and Policy of Central European University in part fulfillment of the Degree of Master of Science

DEVELOPING STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING IN A TRANSITION COUNTRY. THE CASE-STUDY OF BELARUS

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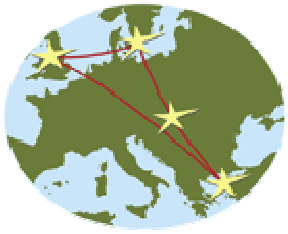
May 2008, Budapest



This thesis is submitted in fulfillment of the Master of Science degree awarded as a result of successful completion of the Erasmus Mundus Masters course in Environmental Sciences, Policy and Management (MESPOM) jointly operated by the University of the Aegean, Central European University, Lund University and the University of Manchester

Supported by the European Commission's Erasmus Mundus Programme

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No portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

Tatsiana PALCHEKH

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ABBREVIATIONS

EA	Environmental Assessment
EIA	Environmental Impact Assessment
ESPOO Convention	UNECE Espoo Convention on Environmental Impact Assessment in Transboundary Context
EU	European Union
GSSC	Generic SEA Screening Criteria
JCSSC	Joint Contextualized SEA Screening Criteria
MoEnv	Ministry of Natural Resources and Environmental Protection of the Republic of Belarus
NIS	Newly Independent States
OVOS	Russian abbreviation meaning Assessment of Environmental Impacts
PA	Preliminary Assessment
PPPs	Plans, Policies and Programmes
REC	Regional Environmental Center
SD	Sustainable Development
SEA	Strategic Environmental Assessment
SEA Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
SEA Protocol	Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context, UNECE, adopted on 21 May 2003 in Kiev
SER	State Environmental Review
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
WHO	World Health Organization

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to

Aleh Cherp, my supervisor, for his brilliant ideas, invaluable help, advice, patience and countenance;

Ruben Mnatsakanian, my dean, for his support and understanding;

Elena Layevskaya, Tamara Makarova and other members of the Law Department of Belarusian State University for their help, guidance and valuable information, which became a great contribution to my research;

Tamara Steger, whose course in qualitative research methods helped a lot to develop the methodology for this research;

And the last but so important, to ***Istvan Gyulai***, my husband, for his love and devotion day by day, for his desire to experience all my moods and his ability to create around me calm atmosphere most comfortable for intellectual work.

This work I dedicate to
my mother, Liudmila Palchekh,
the strongest and the most generous,
the most beautiful person I've even seen.

***

Эту работу я посвящаю своей маме,
Людмиле Пальчех, самому сильному и
щедрому, самому прекрасному человеку
из всех, что я знаю.

THE CENTRAL EUROPEAN UNIVERSITY

ABSTRACT OF THE THESIS submitted by: Tatsiana PALCHEKH
for the degree of Master of Science and entitled: (*Developing Strategic Environmental Assessment screening in a transition country. The case-study of Belarus*)
Month and Year of submission: May, 2008.

Screening is the initial stage of strategic environmental assessment (SEA). Screening aims to answer if further application of SEA to assessed planned strategic activity is needed. The procedure for SEA screening is defined in international documents (SEA Protocol and SEA Directive), however their provisions are very general and leave certain freedom of interpretation. The responsibility to develop SEA screening criteria and define it in national laws rests on each member-state.

Screening approaches and types of screening systems vary greatly from country to country. There are experienced countries which have reached certain success in this field (Denmark, UK, Canada, etc) and there are states which are still in the beginning of their way towards the establishment of effective and efficient screening system (e.g. NIS). When developing a screening system countries face a number of problems which are concluded mainly in finding a proper *balance* between such factors as national context specificity and obligatoriness of international regulations, cost of screening and its level of precision, flexibility and uniformity of screening procedure, etc. There is a clear need in the development of frame SEA screening criteria which would guide SEA system developers towards finding such a balance.

For this purpose generic SEA screening criteria (GSSC) and a scheme of their contextualization are developed in this thesis. Requirements for screening found in the literature, international documents and extracted from reviewed international practices are analyzed, considered and systematized in a form of generic SEA screening criteria. GSSC are based on a number of crucial principles such as legitimacy, flexibility of screening system, informal application, acceptance, balance between cost and necessity, reasonable efforts and others.

The Republic of Belarus is chosen as a field of application of GSSC-contextualization scheme. The elaboration of the requirements for the effective and efficient SEA screening system in Belarus is made by means of application of GSSC in the Belarusian context with regard to its specificity and the challenges which this application may face.

Keywords: strategic environmental assessment (SEA), screening, strategic planning, Belarus, screening criteria

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1 INTRODUCTION

1.1 BACKGROUND AND RATIONALE

Modern society is developing and thus changing continually and at the same time rapidly. Now it is evidence, which does not need to be proved anymore, that many kinds of human activity leave certain and often very negative print on the environment. In order to prevent or at least minimize this negative impact human activities should be, first of all, assessed in order to reveal and prevent this impact.

There is a wide variety of environmental assessments tools, methods and techniques aimed at evaluation of environmental impact of human activities in their various forms. **Strategic environmental assessment** (SEA) is one of such tools. It is applied to various strategic initiatives such as policies, programmes and plans (PPPs) and other activities having different names but same characteristics, defined in international and national documents (Cherp 2001; Sadler 1996; Therivel 2004; Lee and George 2000; Sommer 2005). Strategic environmental assessment is based on comprehensive analysis which allows to predict and to some extent measure possible impact of planned strategic activities outright on the stage of planning (Cherp 2001; Sadler 1996) facilitating in this way the promotion of sustainable development. In other words, SEA is a “systematic process for evaluating environmental consequences of a proposed policy, programme or plan and their alternatives in order to ensure they are fully included and appropriately addressed at the earliest suitable stage of the decision-making process” (Sadler and Verheem 1996)

Implementation and running of strategic environmental assessment is any country always faces various challenges and one of these challenges is selection of strategic initiatives which should undergo SEA. This process of selection is called screening. As a result of SEA screening the decision upon the necessity of SEA application is made.

The selection of initiatives for SEA is a complex issue. On one hand, the wider the range of plans, progammes, policies and their alternatives which will undergo SEA the higher is the level of environmental awareness maintained in a country. On the other hand, application of SEA to all initiatives is also impossible due to diverse reasons including economic considerations and risk of bureaucracy which will be provoked by such unscrupulous selection.

There are no single, univocal international requirements (criteria) to 'good' SEA screening, though there is a number of screening criteria resulting from international regulations and widely accepted practices. Two main international agreements in the field of SEA are the SEA Protocol and SEA Directive. These documents contain basic regulations, leave certain freedom of interpretation for member countries and do not provide a 'panacea' for all challenges, which can be met setting up SEA screening system on the national level. Together with common regulations defined in international documents common challenges and difficulties in establishing SEA screening procedure are inherited by member-states. Hence, member-countries are supposed to develop and implement their own SEA screening criteria in the framework of ratified international agreements.

Screening practices vary from country to country. Some states have already solved the problem of SEA screening criteria development and successfully apply these criteria according to the established SEA system, procedure and principles (Denmark, New Zealand, Canada, etc), some countries are just in the process of such development (Newly Independent States and others). Development of a screening system on a national level should always take into account the need to find a balance between the requirements of international agreements and the 'requirements' of a specific national context. Contextual 'requirements' can be different but basically they mean the barriers for implementation of SEA screening resulting from some features of national environmental assessment and planning systems. It is particularly actual and relevant for Newly Independent States with their specific EA system (mostly not including assessment of strategic documents and having just some selected features of para-SEA) inherited from the Soviet Union. Introduction of SEA screening in such contexts can not be made 'from the inside' (which means development of screening criteria just basing on contextual specificity). At the same time radical introduction of screening criteria 'from the outside' (which means international agreements and advanced practices) will be inefficient, ineffective or simply rejected.

This 'inside-outside' screening criteria problem is just one challenging issue in the development of screening system. Many other problems such as, again, finding a balance between cost and precision of screening, time consumption and effectiveness and other need to be solved.

Though many studies have already been made in the field of the development of SEA screening systems, the problems underlined above are not addressed yet. There is a need to elaborate such set of requirements, criteria or guiding principles for the development of a screening system which would, on the one hand, be based on the provisions of international documents and extractions from best screening practices and, on the other hand, address national challenges for SEA screening. In other words the development of criteria which would bring together 'inside' and 'outside' approaches is required.

In the framework of this study the Republic of Belarus is chosen as a field for the development of such screening criteria. Belarusian context consisting of environmental assessment and strategic planning systems is also typical for other Newly Independent States.

SEA system in Belarus is a relatively new issue, namely no strategic environmental assessment system is implemented in Belarusian state planning system yet. At present time the country is still running assessment systems inherited from the Soviet Union - State Environmental Review (SER)[1] , which requires assessment of all projects and plans, and Assessment of Environmental Impacts (OVOS) [2], which requires mandatory assessment of projects collected in a developed list. Though it is defined in the law that strategic initiatives fall under the scope of SER, on practice they are not reviewed. However, current tendencies in the development of Belarusian national politics include

[1] SER is modified by the Laws on SER (1993 and 2000)
[2] OVOS is modified by the Regulation on EIA (2005)

the courses aimed at the sustainable development of the country with particular focus on the environmental protection and strategic environmental assessment. For example a number of strategies, forecasts and programmes which include environmental concerns and facilitate sustainable development have been recently accepted in Belarus [3]. In order to achieve environmental goals included in these documents, national strategic initiatives need to undergo SEA.

Apart from 'internal' drivers for the development of SEA system in Belarus in general and SEA screening system as its essential in particular, there are also important 'external' drivers to be mentioned. These drivers are international agreements signed by the Republic of Belarus. Specifically, Belarus has signed the ESPOO Convention and is preparing to sign the SEA Protocol. Therefore, the capacity for implementation of the Protocol needs to be built. This capacity-building includes, undoubtedly, the development of effective SEA screening system in order to fulfill particular requirements of the Protocol.

So, what criteria should underline the elaboration of national SEA screening system in Belarus? These criteria should undoubtedly include the requirements of the SEA Protocol, which, as it as mentioned above, need to be supplemented by a number of other provisions developed on the national basis. Extremely limited experience in SEA in

[3] For example, "National strategy of sustainable socio-economic development of the Republic of Belarus for the period till year 2020", "National action plan on the rational exploitation of natural recourses and environmental protection in the Republic of Belarus in 2006-2010", "National programme on the development of protected natural areas in the Republic of Belarus in 2008-2014", "National complex programme on the modernization of main production funds of

Belarus (several pilot-SEAs) defines the necessity to base these criteria on the international experience. However, specific post-soviet context of the country does not allow to 'copy' screening approaches of developed countries with rich SEA practice and established SEA procedure. At the same countries with similar context (Newly Independent States) also have limited SEA experience, short SEA development history and can not boast of 'perfect' screening system.

Thus, setting up SEA screening system in Belarus should be based on some 'generic', but contextualize criteria which, on the one hand, are framed by international regulations and accumulate 'positive' experience of various countries, but on the other hand take into account national specificity and address possible challenges of implementation process. In the framework of this thesis these criteria are developed and justified.

1.2 AIMS AND OBJECTIVES

This thesis aims to develop criteria for SEA screening and research their implementation in a transition country via their contextualization thorough EA and planning systems of the Republic of Belarus.

The following objectives are addressed in this research:

1. Development of generic SEA screening criteria based on of international concepts and practices of SEA screening
2. Analysis of EA screening system and state system of strategic planning in Belarus
3. Revelation of challenges for the GSSC application in Belarusian context

4. Development of joint contextualized SEA screening criteria (JCSSC) for Belarus

1.3 SCOPE AND LIMITATIONS

The scope of this research is bounded by the field of screening in strategic environmental assessment (and in some case by the screening in other types of environmental assessments) both theory and practice. This research considers known SEA and partially EIA screening theories. Further, in order to address main research questions and fulfill research objectives the research scope is narrowed down to the SEA screening systems of selected countries and then to the EA screening in the Republic of Belarus. State system of strategic planning in Belarus also falls under that scope of this research as since SEA system is inseparably connected to it.

The need for the development of generic SEA screening criteria and its further contextualization for application in Belarus shapes the boundaries of the scope of this research.

This study faces as well a number of limitations and obstacles. Mainly, it is limited by the lack of studies on the SEA screening and actual absence of SEA practice in Belarus – so no SEA theory in Belarus has been generated yet. Basically, the procedures of SEA screening applications are described in international documents (SEA Protocol and SEA Directive) and various guides supplementing these documents.

The study of the context for the implementation of SEA screening in Belarus is complicated by the sophisticated system of state strategic planning and absence of legal documents regulating this field. State system of strategic planning in Belarus is not described in the literature; types of strategic documents developed are not categorized.

1.4 STRUCTURE AND METHOD OF THE RESEARCH

The structure and sequence of this research are presented on the *Scheme 1*. The first step of the investigation (part 1 of block 1 on *Scheme 1*) is the literature review made in order to study main concepts and definitions in the field. This research section also grasps best-known screening approaches described in the literature. Special focus is made on deriving of the requirements to a good screening system in the way they are recognized by various authors and stated in the international documents (the SEA Protocol). Further, the study proceeds to the analysis of SEA screening practices of selected countries. Practically, the countries selected are divided into two groups – Newly Independent States and all other countries. Such division is grounded on the idea of separation of national contexts similar to Belarusian one from contexts different to it. The review of screening systems of selected countries makes particular focus on the

- 'SEA architecture' (Sadler 2005) in the country
- Screening in SEA system (approach, procedure, 'field of application, etc)
- Authorities responsible for SEA (including screening) and other participants of the screening process
- Defects of screening system

Examination of screening practices supplemented with the requirement for SEA screening evolved from the literature, form the foundation for the development of the generic SEA screening criteria (GSSC). GSSC represent a set of requirements general for the development of SEA screening system in any country. The ideas about the areas to be researched in the section 2 (*block 2 on Scheme 1*) are formulated on the basis of the section 1.

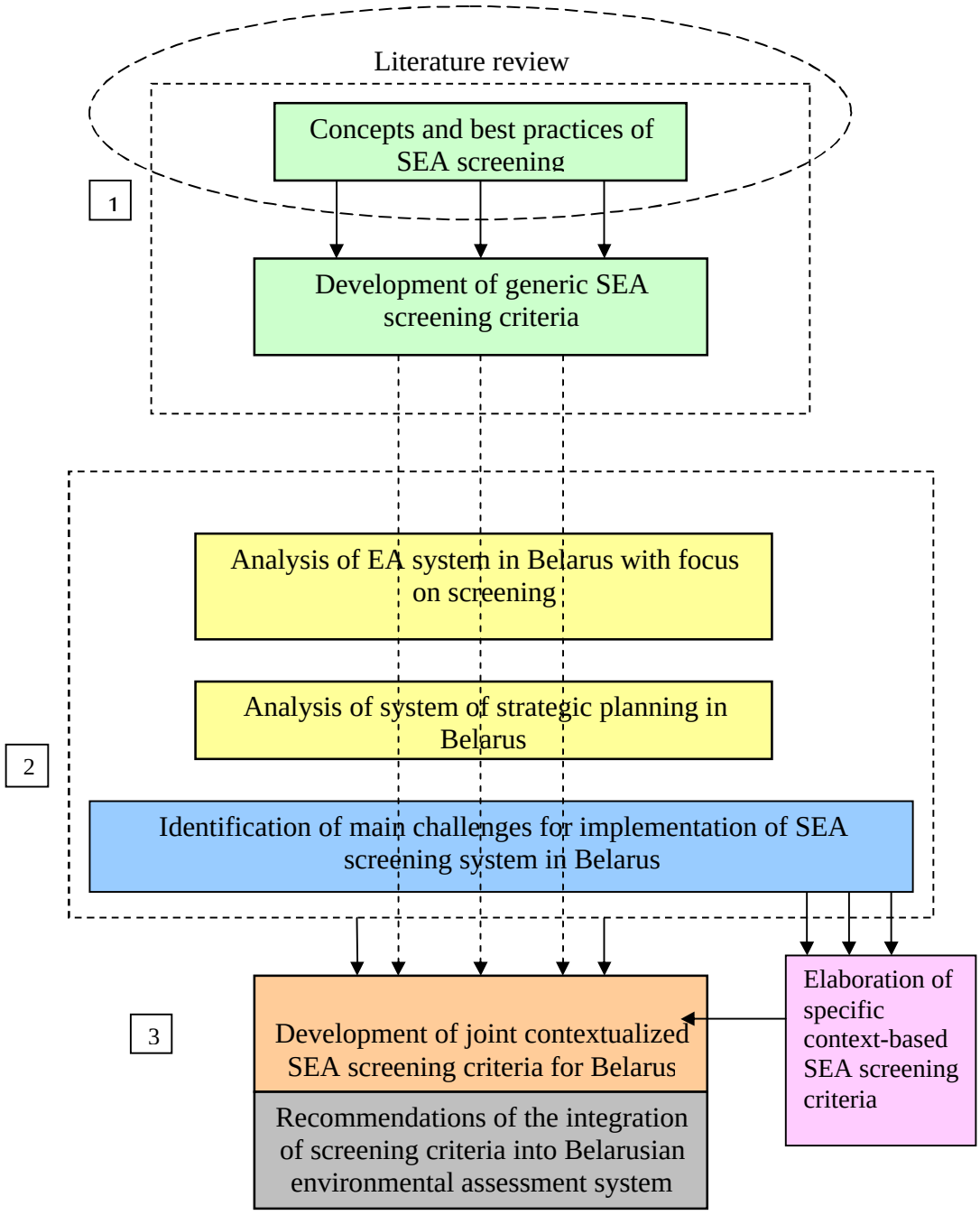
The next research section (block 2 on *Scheme 1*) is devoted to the analysis of context for establishment of SEA screening system in Belarus. The context or, as it can be also called, recipient-system or background-system, includes, in particular, the current system of environmental assessment of strategic-level initiatives (with focus on screening procedure) and system of state strategic planning in the country. Analysis of the context concentrates on the issues most important for the further pointing out the challenges for the implementation of SEA screening in Belarus. Further, the challenges are evolved in the system, human and institutional dimensions of the background.

As a result, each discovered obstacle is addressed by a corresponding clause of a specific context-based SEA screening criteria developed in section 2.

The third section of the research (block 3 on *Scheme 1*) joins the results of sections 1 and 2 in the development of joint contextualized SEA screening criteria (JCSSC). JCSSC combine the clauses of GSSC and specific context-based SEA screening criteria and thus

form a system of 'good' recognized screening requirements applicable in Belarus and addressing discussed challenges.

Scheme 1. *The structure of the research*



This research is supported by a careful selection and compilation of research methods.

The following types of methodology are utilized:

- Descriptive/analytical (for 1,2,3 blocks on *Scheme 1*)
- Developmental (for 2, 3 blocks on *Scheme 1*)
- Problem-solving (for 3 block on *Scheme 1*)

Particular research methods and tools applied are presented in the **Table 1** below.

Table 1. *Methods and methodological tools applied in the research*

Research method		
Qualitative research The research is based mainly on qualitative methods		
Interpretive analysis (including interpretive policy analysis)		
Analysis of regulatory SEA screening theory	Analysis of descriptive SEA screening theory	Analysis of SEA screening practice
Study of international and national documents, laws, regulations, decrees, etc	Study of interpretive and implementation guides for international and national documents, manuals, articles and other publications, etc	Study of reports, articles, archival research, databases, websites, collections of papers, etc
Interviews		

Interviews are also used in this research and include interviews with Belarusian decision-makers, experts and researchers in the field. The cooperation was administered via email, telephone and personal communication.

This research is based on both primary and secondary methods and includes mainly so called “case-oriented” (intensive, small “N”, complexity type) examination. Some “variable oriented” (extensive, “large N”) examinations are also applied, but just in the framework of analysis of known screening practices.

1.5 VALIDITY OF THE RESEARCH

A number of methods is applied to increase both transactional and transformational validity of the research. They are

- Use of diverse research methods
- Involvement of co-researchers (Misiuchenko V), namely in a form of co-checking to make sure that validity is not compromised.
- “A valid source would be true every time” (Kvale 1996), so systematic use of feedbacks and “running of research cycle”, replication of research (very limited, where appropriate)
- Examination of meanings which are usually taken for granted (for example, sustainable development)
- Self-assessment
- Critical reflexivity

- Use of contradictions for re-checking

1.6 THESIS STRUCTURE

The structure of this thesis reflects (with slight modifications needed for better presentation) the structure of the research (*Chapter 1*, *Section 1.4, Scheme 1*). Thus, this thesis consists of three principal chapters, *Introduction (Chapter 1)* and *Conclusion (Chapter 5). Chapter 1* introduces the problematic area of the research, defines main aims and objectives of the study, states research hypothesis, outlines scope and limitations, structure and method of the research, validity of the research and thesis structure. *Chapter 2* is devoted to the introduction of main concepts and practices of SEA screening. *Chapter 3* presents generic SEA screening criteria developed in this research. *Chapter 4* is dedicated to the examination of the background for the implementation of SEA screening system in Belarus and contextualization of generic SEA screening criteria. *Chapter 5* summarizes main findings of this thesis. Each chapter consists of thematic sections.

2 CONCEPTS AND PRACTICES OF SEA SCREENING

2.1 INTRODUCTION OF DEFINITIONS – SEA SCREENING

It is commonly recognized and defined in literature (Sadler 1996; Therivel 2004; Lee and George 2000; Sommer 2005) that strategic environmental assessment usually consists of screening, scoping, environmental assessment, review, implementation and monitoring, consultation and participation, decision-making.

Screening, according to Lee and George (2000) is "deciding weather the nature of the action and its likely impacts are such that it should be submitted to the environmental assessment". Screening is aimed to decide upon the "overall significance" of the summarized impacts of action under evaluation (Lee and George 2000). Simplifying the definition it can be said, according to Therivel (2004), that screening process is answering a question – "Does SEA need to be applied?". Thus, screening is the first and very important stage of the SEA process resulting in a very fundamental decision if a selected strategic action will include environmental considerations on each stage of its realization by means of SEA. Yet, some authors (Sommer 2005) single out screening outside the SEA process itself and consider it as its non-mandatory stage [4]. However, this

[4] In the given context non-mandatory nature of screening stage means that there are systems which do not require selection of PPPs for SEA but apply the assessment to all strategic actions.

is a very really controversial opinion challenged by a wide range of authors who consider screening as an inalienable stage of every environmental assessment (Therivel 2004; Lee and George 2000).

It is important to underline, that screening is aiming at the correspondence of procedure and content of environmental assessment with the significance of possible environmental impacts of proposed activity (Cherp 2001).

2.2 SCREENING APPROACHES AND TYPES OF SCREENING SYSTEMS

The whole variety of screening approaches can be divided into three types coming out from two principal screening approaches (Cherp 2001; Sommer 2005; Lee and George 2000; Caratti et al 2004; Seht 1999).

1. The **first approach** is based on the so-called 'preliminary assessment' (PA) (Cherp 2001; Lee and George 2000). Preliminary assessment is a procedure for the case-by-case examination applied to the whole range of proposed strategic initiatives to evaluate possible environmental significance in order to define the necessity of the full SEA procedure (Cherp 2001; Lee and George 2000).

   Unified pre-screening procedure can be divided into several steps (African Development Bank 2003):

   - Definition of the actual content of PPPs
   - Identification of the targeted policy area or sector

- Identification of environmental and social considerations raised in the pre-feasibility phase

PA is widely used, for example, in the United States. PA results in a document with the decision about absence of significant environmental effects of a proposed activity or in contrary about their presence and thus the necessity of SEA application (Cherp 2001). Cherp (2001) stresses that PA allows to conduct screening process on a flexible basis - distinguish projects types, take into account local characteristics and support public participation. Cherp (2001) also indicates the disadvantages of that screening system. First of all, it does not guarantee the SEA of all dangerous plans and, secondly, it anyway requires assessment even if it is preliminary. This PA is also resource and time consuming.

2. The **second approach** is based on the assessment of actions collected in lists (Cherp 2001; Lee and George 2000; Sadler and Verheem 1997). These lists normally contain environmentally dangerous types of strategic-level activities, which undoubtedly require strategic environmental assessment. There are also "negative" lists containing, vice versa, actions which do not have significant negative effect on the environment (Cherp 2001; Lee and George 2000; Sommer 2002). In general, screening lists can be based on the different selection criteria. For example, dangerous types of PPPs can be defined in national legislature directly or/and adopted from international documents (for instance, from SEA Directive or SEA Protocol). Screening system based on lists is simple in the application, but lacks flexibility and adoptability (Cherp 2001). Lee

and George (2000) believe that this screening approach is most often applied when it comes to the assessment of plans, programmes and policies.

3. The **third approach** is a mixed or "hybrid" method, which combines PA and 'list-type' approaches (Cherp 2001; Lee and George 2000; Sommer 2002). Mixed approach is based on a variety of particular methods (relevance matrix, Dutch E-test, ADB requirements, checklists, tree diagrams and similar tools). These types of screening are mainly applied during the EIA but can be also extrapolated on the SEA screening procedures (as it is in Denmark) (Lee and George 2000).

Screening approaches vary from country to country. Therivel (2004), for instance, provides an example of the United States, where the US National Environmental Policy Act (NEPA) requires the assessment of all "major Federal actions significantly effecting the quality of the environment". Therivel (2004) mentions that the term 'actions' includes both projects-subjects to EIA and strategic plans, which become a subject for SEA analogue in the US, namely, to "programmatic EIA". As Therivel (2004) believes, this "flexible" definition leads to uncertainties and, as a result, to a number of lawsuits about the significance of the effects of any of the selected strategic actions.

Some other countries such as, for example Denmark and New Zealand, arrange their screening lists according to the type strategic actions (regional development plans, proposals to the Parliament, sectoral development activities, etc) (Sadler 2005). Another interesting example of screening practice under the SEA Directive is the selection of strategic initiatives in the United Kingdom. Therivel (2004) mentions that there are still

uncertainties in the application of screening provisions of the SEA Directive in the UK. Decisions about the necessity of SEA application are "likely to be made on case-by-case basis".

Reverting to the types of screening - each of the screening approaches (types) can be applied by a wide variety of screening methods/tools. The selection of screening approach and definition of procedure is largely driven by the accepted ***screening criteria*** as it is illustrated on the *Scheme 2.*

Scheme 2 *Screening system*

Screening criteria **à** *screening approach (screening type)* **à** *screening procedure*

Screening criteria contain a set of main principles/requirements for a screening system in a country. Screening criteria consist of a set of provisions. Screening criteria are usually defined (at least partially) in national and international legal documents.

Despite the fact that screening criteria differ, the whole variety of screening systems can be united by the common requirement of mandatory application of SEA to all planned strategic initiatives which have significant environmental impact (Lee and George 2000). But it is not always clear what exactly is meant by the "significant environmental impact". Definition of the particular "weight" of this criterion rests on the responsibility of each country. Evaluation of screening provisions can be also found in the interpretations (implementation guides, methodological guidelines, resource manuals,

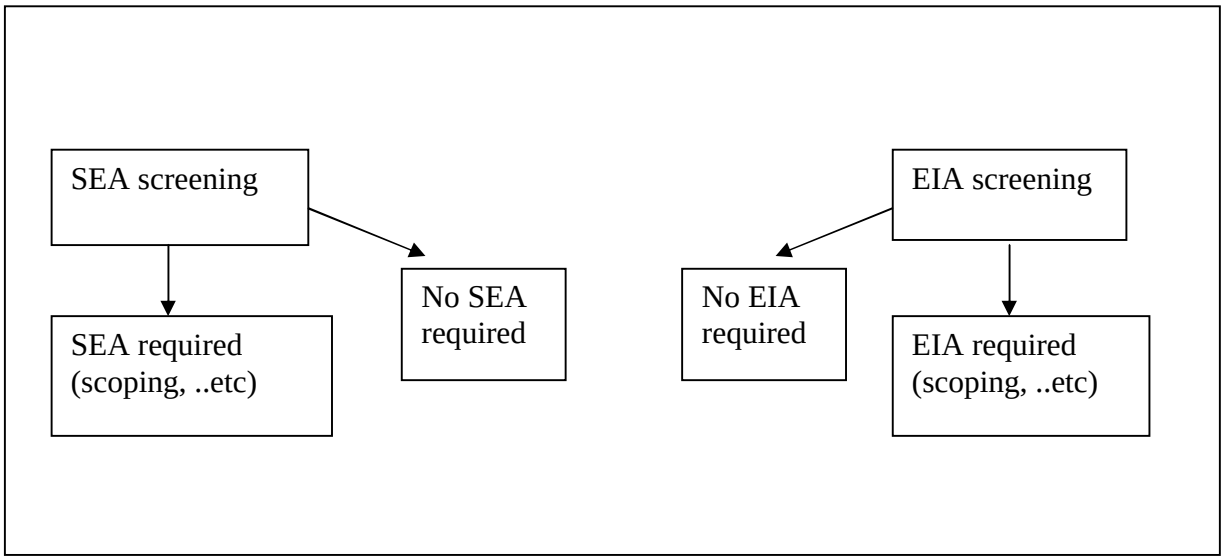
etc) of international documents – the SEA Directive and SEA Protocol. These documents contain regulations on the selection of PPPs (screening) which should undergo strategic impact assessment.

The urgency of need for the development of screening criteria are defined by a number of authors. For example, Lee and George (2000) stress on the necessity of the development of clear, flexible and simple screening criteria (especially when it comes to developing countries) and indicate the need for collection of screening decisions available to the public. The problem of the elaboration of screening criteria is also raised by Bellinger (1999). Therivel (2004), in his turn, insists of the requirement of "setting-up" screening criteria which will define the categories of PPPs falling under the scope of SEA.

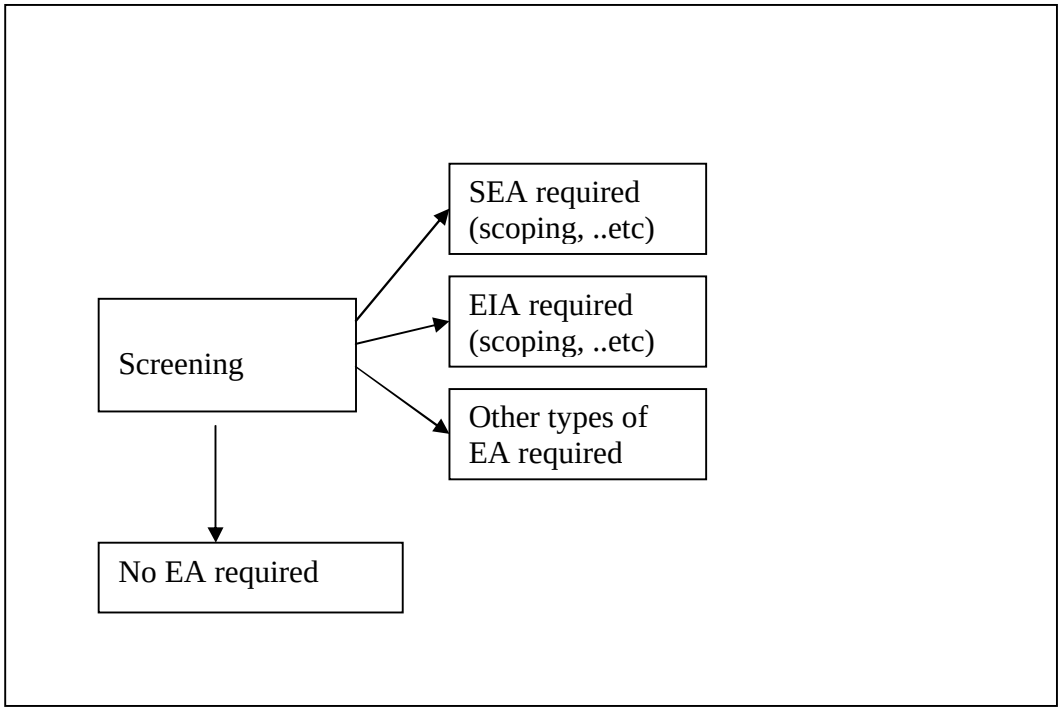
Place of screening in the assessment system

It is commonly accepted that screening is the initial part of each type of environmental assessment. SEA procedure includes SEA screening, EIA procedure – EIA screening and so on *(Scheme 2).* However, for example, in the case when SEA is merged with EIA, screening is brought out from the SEA procedure ('EIA mainframe'). In this case screening is separate tool which, apart from the decision upon the **necessity** of EA should also define the **type** of EA to be applied *(Scheme 3).*

Scheme 3. *Screening tied to assessment types*



Scheme 4. *Screening defining the type of EA*



2.3 STRATEGIC INITIATIVES AS A FIELD FOR APPLICATION OF SCREENING

Policies, programmes and plans are traditionally considered as objects for application of strategic environmental assessment. However, there is no one, unified international definition of PPPs applied in the context of SEA (Cherp 2001; Sadler 1996; Therivel 2004) The definition of plans, programs and policies can have different meaning and nature in various countries (Donelly et al. 1998; Cherp 2001). Moreover, the determination of what to consider as a strategic initiative, strategic document and strategic action is highly dependent on the national planning system and political context (Donelly et al. 1998). However, Donelly (1998) specifies the common nature of all policies as something "taken to be broad statements of intent that reflect and focus the political agenda of a government and initiate a decision cycle". Programmes and plans in their turn serve to achieve policy aims and set "specific actions" (Sadler and Verheem, 1996). PPPs normally include set of strategic decisions resulting in environmental, social, economic and other consequences (Dalal-Clayton 1998). Strategic environmental assessment should be applied to wide range of strategic actions from "policy initiatives to concrete programmes and plans that have physical and spatial references" (Donelly et al 1998; Sadler 1998). Cherp (2001) in his work "Environmental assessment and Environmental expertise" employs the definition of PPPs which includes complete range of initiatives outside the framework of concrete projects.

Sadler (1996) gives general definition for policy, programme and plan:

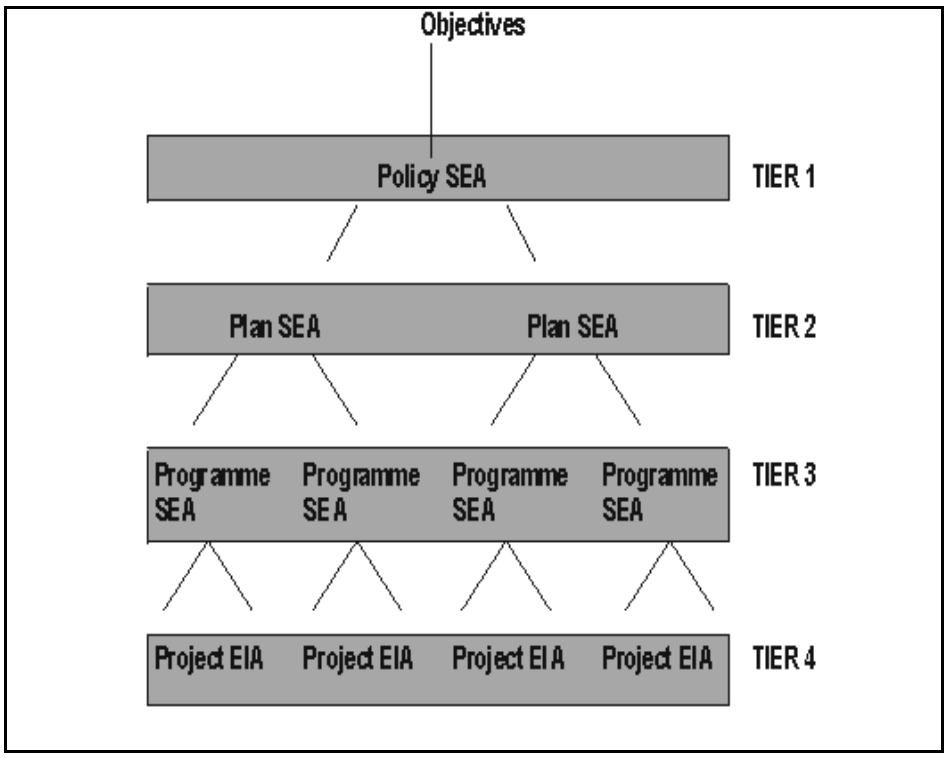
- **Policy** is “a general course of action or proposed overall direction that a government is, or will be, pursuing and which guided ongoing decision-making”. Policy may contain legislation, government strategies, papers, memoranda or statements, norms, guides, principles or arrangements that are understood or acted upon as if they were policy or law. (Sadler 1994; Buckley 1998; Dalal-Clayton and Sadler 2005).

- **Plan** is “a purposeful, forward-looking strategy or design, often with coordinated priorities, options and measures that elaborates and implements policy” (Dalal-Clayton and Sadler 2005)

- **Programme** is “a coherent, organized agenda or schedule of commitments, proposals instruments, and/or activities that elaborates and implements policy” (Dalal-Clayton and Sadler 2005)

Glasson (1994) believes that all PPPs are tiered in the strict hierarchy (*Scheme 5*), however Donelly (1998) states that though PPPs are often regarded as an ideal tiered and hierarchical system in reality it is far from that. In fact planning system is more “complex and iterative process” (Sadler 1998) and the concept of tiering is hardly applied on practice (Jones 2003)

Scheme 5. *The concept of tiering*



Source: Glasson et al. 1994

Approaches to definition of the field for SEA application differ. For example, in the UK and the Netherlands SEA is applied to programmes, policies and plans. In Canada and Denmark (bills for Parliament) some worms of national laws also fall under the scope of SEA (Sadler 1998)

Since SEA is considered a decision-making tool, each stage of SEA should correspond to a proper stage of strategic planning. Decision upon the necessity of SEA application, in other words screening, should be applied on one of the earliest stages of elaboration of

strategic document, namely on the stage of concept development and definition of objectives (Therivel and Partidario 1996).

There are very few studies devoted to the development of requirements for SEA screening. The majority of authors focus on the quality improvement of further SEA stages and start their discussion assuming in each case that screening is already performed and the need for SEA is proved.

2.4 SCREENING PROCEDURE UNDER THE SEA PROTOCOL

Development of SEA screening criteria and their legal definition is taking place on the national level. Each country has its inalienable right to decide which strategic initiatives require strategic environmental assessment. However, there is a number of international agreements developed on the basis of international experience and containing provisions on SEA including SEA screening. “There are two legal documents that specifically set the international regulatory framework for SEA, namely, the European SEA Directive and the Kiev SEA Protocol.” (Chaker et al 2004). Countries, members of these agreements, voluntary take the responsibility to fulfill the requirements contained in these documents. Moreover, member-states are supposed to bring their national legislature into compliance with the Protocol.

Evaluation of international documents in the framework of this research is restricted to the analysis of the SEA Protocol. First of all, “the scope and requirements of the Protocol are quite similar to those of the European SEA directive except for the emphasis placed

on the consideration of health impacts, which reflects the active participation of the World Health Organization (WHO)" (Chaker et al 2004; Cherp 2001). And secondly, according to the data of the Ministry of Natural Resources and Environmental Protection (MoEnv) the Republic of Belarus is preparing to sign the Protocol. Thus, to fulfill the aims of this research, it makes sense to concentrate on the SEA Protocol, as currently Belarus needs to create preconditions for its successful implementation and operation including the development of proper screening system. However, the implementation of screening regulations of the SEA Directive is also touched in the framework of study of international screening practices (*Chapter 2, Section 2.5*). Some of the countries selected for the analysis built their screening system (fully or partially) on the provisions of the SEA Directive (foe example, Austria).

"The SEA Protocol aims to ensure that environmental (including health) considerations are thoroughly taken into account in the development of plans and programmes" (REC 2006). The Protocol defines SEA procedure for each stage of assessment. *Article 2*, *Paragraph 5* of the SEA Protocol determines SEA procedure as "the evaluation of the likely environmental, including health, effects, which comprises the determination of the scope of an environmental report and its preparation, the carrying out of public participation and consultations, and the taking into account of the environmental report and the results of the public participation and consultations in a plan or programme".

SEA screening regulations are presented in *Article 4*, which outlines the field for SEA application – plans and programmes, *Article 2.5*, which explains what, according to the Protocol, actually "plan" and "programme" is, *Article 5* (*Screening*), which establishes

the procedure and criteria for selection of plans and programmes for SEA, *Annexes I, II* which include lists of projects referred to in *Article 4* and *Annex III* and containing the "criteria for determining of the likely significant environmental effects referred to in article 5, paragraph 1" (Resource Manual to Support Application of the Protocol on SEA, 2007 (The Resource Manual)).

Box 1. *Article 2.5*

5. "Plans and programmes" means plans and programmes and any modifications to them that are:
(a) Required by legislative, regulatory or administrative provisions; and
(b) Subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government.

Box 2. *Article 4*

Field of Application concerning Plans and Programmes
1. Each Party shall ensure that a strategic environmental assessment is carried out for plans and programmes referred to in paragraphs 2, 3 and 4 which are likely to have significant environmental, including health, effects.
2. A strategic environmental assessment shall be carried out for plans and programmes which are
prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent for projects listed in annex I and any other project listed in annex II that requires an environmental impact assessment under national legislation.
3. For plans and programmes other than those subject to paragraph 2 which set the framework for future development consent of projects, a strategic environmental assessment shall be carried out where a Party so determines according to article 5, paragraph 1.
4. For plans and programmes referred to in paragraph 2 which determine the use of small areas at
local level and for minor modifications to plans and programmes referred to in paragraph 2, a strategic environmental assessment shall be carried out only where a Party so determines according to article 5, paragraph 1.
5. The following plans and programmes are not subject to this Protocol:
(a) Plans and programmes whose sole purpose is to serve national defence or civil emergencies;
(b) Financial or budget plans and programmes.

Box 3. *Article 5*

Screening
1. Each Party shall determine whether plans and programmes referred to in article 4, paragraphs 3 and 4, are likely to have significant environmental, including health, effects either through a case-by-case examination or by specifying types of plans and programmes or by combining both approaches. For this purpose each Party shall in all cases take into account the criteria set out in annex III.
2. Each Party shall ensure that the environmental and health authorities referred to in article 9, paragraph 1, are consulted when applying the procedures referred to in paragraph 1 above.
3. To the extent appropriate, each Party shall endeavour to provide opportunities for the participation of the public concerned in the screening of plans and programmes under this article.
4. Each Party shall ensure timely public availability of the conclusions pursuant to paragraph 1, including the reasons for not requiring a strategic environmental assessment, whether by public notices or by other appropriate means, such as electronic media.

"The SEA Protocol applies to plans and programmes (and optionally policies and legislation) that are prepared and/or adopted by public authorities on the basis of legislative, regulatory or administrative requirements" (REC 2006). SEA protocol is applicable on any tier of decision-making (or planning) system – proposals for strategic initiatives (PPPs) on the national and local levels (REC 2006). The selection of PPPs for the assessment from this area of application is to be fulfilled by combining of two screening approaches defined in the Protocol – selection of PPPs from a list (included in Appendixes) and case-by-case examination on the basis of specified criteria (significant health and environmental impact). Thus, according to the Protocol, SEA should be applied to those plans, programmes and policies which "set the framework for future projects that will require EIA and are prepared for agriculture, forestry, fisheries, energy, industry, mining, transport, regional development, waste management, water management, telecommunications, tourism or land use". The SEA Protocol contains, as it was mentioned above, a set of requirements forming a procedure for SEA screening.

These requirements can be divided into two parts, which can be nominally called ‘field of application’ and ‘need for application’.

2.4.1 ‘FIELD OF APPLICATION’

Definition of the ‘field of application’ is supposed to answer the question “if SEA can be theoretically applied to a selected strategic initiative”. First of all, "to determine whether SEA is required under the Protocol, it is necessary to determine whether the plan or programme being considered falls within the Protocol’s definition of a plan or programme (*Article 2, paragraph 5*), and within the ‘field of application’ of the Protocol (*Article 4*)” (The Resource Manual, 2007). OECD Guidelines on Applying Strategic Environmental Assessment, 2006 (OECD Guidelines) mention “identification of plans and programmes that fall under the scope of the SEA Protocol” as an important focus area of the assessment of the status of preparation for the SEA Protocol implementation. The name of strategic initiative in a country can be different from that of defined by the SEA Protocol (plan, programme) though having the same nature. In this case, these ‘different’ initiatives still should be an object for SEA application. Thus, “many so-called ‘plans and programmes’ will not require SEA, while some so-called ‘policies’, ‘strategies’, ‘projects’, ‘concepts’, ‘laws’, ‘regulations’ and so on, will” (The Resource Manual, 2007)

It is important to analyze which features strategic initiatives should have to be an object for SEA according to the requirements of SEA Protocol and which considerations should a country apply to define these features.

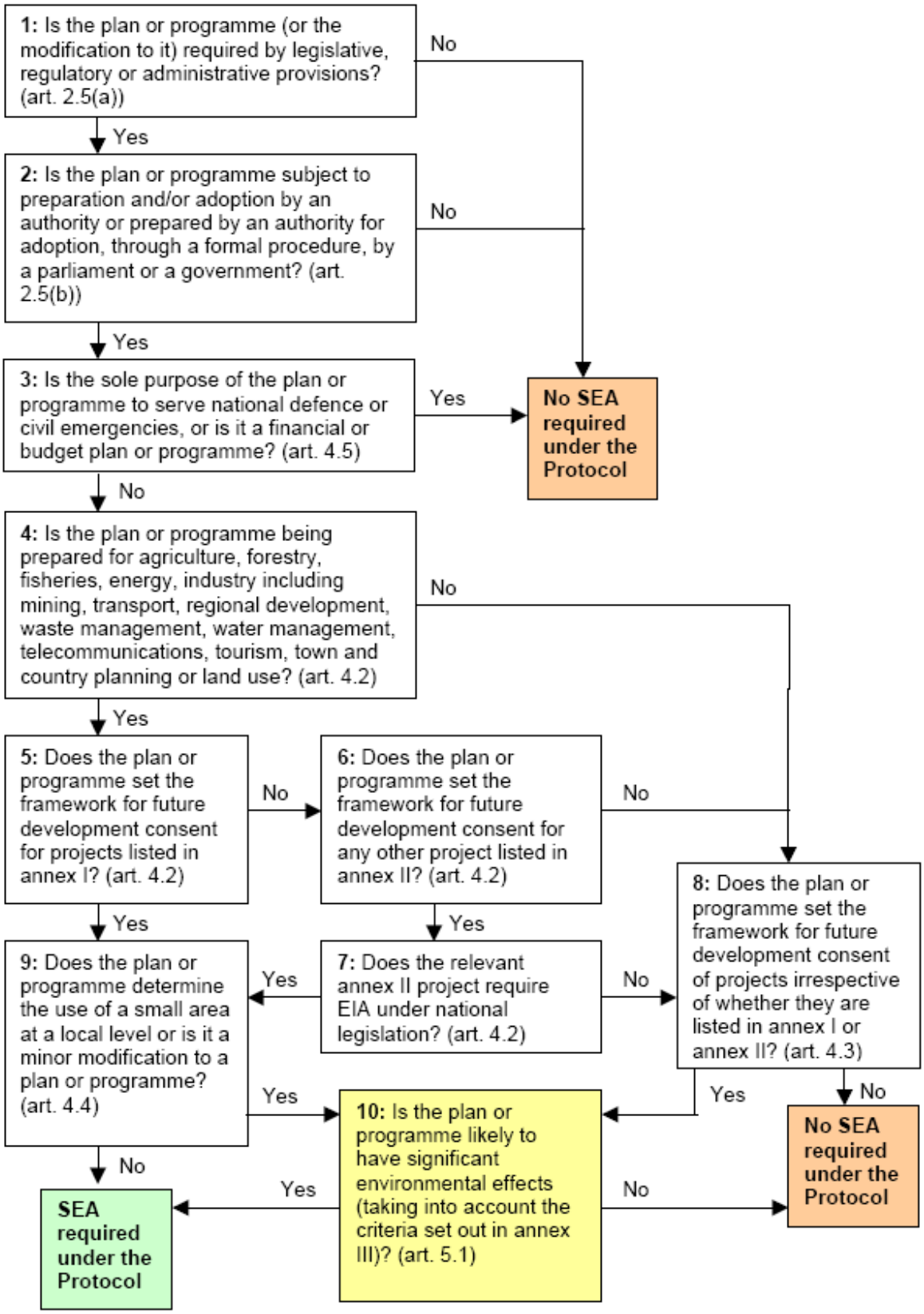
"Plans and programmes" mean "plans and programmes and any modifications to them" (The Resource Manual, 2007) which are "required by legislative, regulatory or administrative provisions; and subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government" (*Article 2*).

2.4.2 THE NEED FOR APPLICATION

The answer for the question "**Can** SEA be **theoretically** applied to a selected initiative?", obtained on the 'field of application' stage is not the same as the answer for the question "**Should** be SEA applied to a concrete selected strategic initiative?". First stage defines the **possibility**, the second stage defines the **necessity** of SEA application.

Not all PPPs which correspond with the definition of 'plans and programmes' contained in the Protocol require SEA. Recognition of strategic initiative as a 'plan or programme' is not enough to prove the need for SEA – the decision about conduction of SEA should be also based on a number of additional criteria and this is defined in the Protocol.
The *Scheme 6* below represents the process of screening under the SEA Protocol. This scheme contains 10 tests (extracted from the SEA Protocol). Tests 1-2 represent the 'field of application' part of the screening, the rest represent the analysis of 'the need for application'.

Scheme 6. *Application of SEA screening procedure according to the SEA Protocol*



Source: Resource Manual to Support Application of the UNECE Protocol on SEA, 2006

The SEA Protocol provides quite clear procedure of screening defined in the tests above, however, there are still two crucial points which can be interpreted with some uncertainty or, it is better to say, with a certain freedom. First of all, the countries should define what they understand as "significant environmental effect". Though, environmental standards are being unified and globalize with the efforts of international community, the definition of "significance" can vary from country to country depending on the general environmental situation in the country, internal environmental policy, level of economic development, environmental history of this country and many others. The Protocol contains suggested criteria of significance presented in the Annex III. The criteria are joined in several general points in the Recourse Manual (UNECE and REC 2007):

- "Contribution to sustainable development
- Degree to which it sets a framework for projects
- Influence on other plans and programmes
- Relevant environmental, including health, problems
- Nature of effects, including whether transboundary
- Risks
- Effect on valuable or vulnerable areas"

Secondly, the Protocol implies that "strategic initiatives which set the framework for the future development of projects which will need EIA under the national legislature" and outlines these criteria as a key requirement. Though projects which would operate in the framework of concrete programme, plan or policy are already planned on the 'concept' stage of the initiative development, sometimes it is hardly possible to foresee what kind of project-level activities will be needed to support fulfillments of goals and aims of this

strategic initiative in the future. Realization of a plan, progamme, policy or any other strategic initiative is not a one-day and not even one-month action. Normally, these activities are planned for years, they face implementation challenges, undergo modifications, adopt to changing context. Apart from the projects planned, a number of new activities are often required on the earliest stages of the PPP's operation, and these projects, unfortunately, are hardly predictable and assessable on the screening stage.
The SEA Protocol contains crucial basics for the development of screening system in a country, however, it can not be considered as all-sufficient solution for the development of complete screening criteria applicable in any national context. The Protocol contains a number of provisions which need to be supplemented by detailed requirements developed on a national level. Screening provisions contained in the Protocol can serve as a "skeleton", starting and guiding point for the development of comprehensive, effective and legitimate SEA screening criteria for a particular context.

2.5 REVIEW OF INTERNATIONAL SEA SCREENING PRACTICE

In this chapter main screening approaches accepted in selected countries are analyzed in order to contribute to the development of generic SEA screening criteria. Outcomes of the evaluation of international screening practices are supposed to supplement the requirements for the 'model' screening system obtained in the literature review.

At it was repeatedly mentioned above, there is no univocal SEA screening procedure based on the unified SEA screening criteria accepted on the international level. Screening

approaches are found briefly listed in various literary sources, country reports and documents. One of the most comprehensive review of screening practices with grouping them into general types is presented in the "Strategic Environmental Assessment at the Policy Level: Recent Progress, Current Status and Future Prospects" edited by Barry Sadler (2005).

2.5.1 'SEA ARCHITECTURE'

According to Sadler (2005) the selection of SEA screening methods on a country level depends greatly on the 'SEA architecture' (SEA model/system/approach, etc) accepted in a country. Sadler distinguishes 4 models of 'SEA architecture', in other words, 4 ways of SEA interrelation with state planning system. One of the key elements for the joining various SEA models in groups is 'the field of application' foreseen for the SEA in a particular country. Thus, 'SEA architecture' and practiced screening approach are inseparably linked with each other. These models are the following:[5]

- **EIA mainframe**

  SEA is regarded as a continuation of EIA legislation (or "modeled on" it) and inheriting its "procedural requirements" based on the SEA Protocol. This model is accepted in USA, Czech Republic, Finland, Slovakia, Poland, Australia

[5] Classification is adopted from "Strategic Environmental Assessment at the Policy Level: Recent Progress, Current Status and Future Prospects" edited by Barry Sadler (2005).

- **EIA modified/appraisal style**

  SEA is separated from EIA and has own procedural elements. In this model SEA sometimes can be a part of other assessment system such as, for example, “policy tests”. This model is used in Canada, Denmark, Finland (legislative proposals only), Netherlands, Norway, UK, etc

- **Integrated assessment/sustainability appraisal**

  “SEA is superseded by or incorporated within a broader process of impact assessment or appraisal of the environmental, economic and social effects of policy or legislative proposals” (Sadler 2005). This approach is accepted in UK, Australia (ad hoc), Hong Kong, etc

- **Sustainable resource management**

  SEA is a part of “sustainability framework” and incorporated into “land use and resource planning” in the framework of sustainability appraisal or as a part of specifically developed “resource strategy”. This approach is typical for New Zealand (called “comprehensive approach”), for Australia for fisheries and in UK in the field of land use planning.

- **EA in NIS**

  Environmental assessment in NIS stands, to some extent, aside the models mentioned above. NIS are characterized by so called “Para-SEA”, which is defined as “SEA processes and elements, which have the same function as formal

SEA processes but only some of their characteristics" (Dalal-Clayton and Sadler 2005). In NIS, features of strategic environmental assessment applied to policy, plans, programmes and other strategic initiatives are found in SER systems. SEA in NIS (with focus on SEA screening) is examined further in *Section 2.5.*

- **Individual Para-SEA approaches**

Not all SEA approaches can be placed within the defined models. There is a number of countries which practice very individual EA systems with some SEA features. NIS, though joined above into a separate category, belong to this group. For example, 'EIA mainframe' model uses screening criteria defined in the SEA Protocol and grounded on the "determination whether proposals are likely to have significant environmental effects". 'EIA modified/appraisal style' model is based on the "preliminary scan", which means "determination whether important strategic, environmental considerations are likely" (UNECE 2003). And if they are likely, or there is uncertainty about that or any risk, then an application of detailed SEA procedure is needed. Such countries as, for example, Czech Republic, Slovakia and Poland apractice mandatory SEA application to a proposals which relate to lists of 'fields of application' defined in the legislature. In this case just a limited set of strategic actions is "covered with strategic environmental assessment" (Sadler 2005). For, example, the lists of mandatory assessment in the named countries include proposals in energy, mining, industry, transport, agriculture, forestry, water, waste and tourism (Sadler 2005). Arrival of new vital policies, such as trade policies make some countries and institutions revise their lists and rank PPPs according to their environmental significance and thus priority (Canada, European Commission).

2.5.2 REVIEW OF SCREENING PRACTICES IN SELECTED COUNTRIES

The *Table 2* below is compiled of data obtained from the literature, country reports and national legal document. It includes three main blocks of information for each selected country correspondingly. These blocks represent the 'field of SEA application', traditional for a country, the criteria applied and other notes which might include other important practical issues (screening procedure, responsible authorities, etc).

The tabular form is chosen in order to provide better visually and readability in the process of analysis of screening practices aiming at the development of generic criteria. These states are selected randomly from the list of countries known in the literature as ones which introduced SEA or its analogues.

Table 2. *SEA screening in selected countries*

Country	**'Field of application'**	**Basis for the screening criteria**	**Other important points**
Canada	Plans, programmes and policies	<u>In pre-screening:</u> Important environmental Considerations, which are likely to arise from implementation of a proposed policy, plan or program" (Sadler 2005) <u>In screening:</u> • the scope and nature of environmental effects (frequency and duration, location and magnitude, timing, risk) ; • **the need for**	Screening applied when "the proposal is submitted to an individual minister or Cabinet for approval" (Sadler 2005) Case-by-case examination is used. Screening has 2 stages: - *Preliminary scan* It supposed to be applied as early as possible. Applied by policy analyst - *Screening* Screening, applied

		mitigation; • the scope and nature of residual effects; • any requirement for follow-up; and public and stakeholder concerns (who is most effected?) • environmental priorities (legislature)	when pre-screening identified "the potential for important environmental considerations, either positive or negative, or if there is a high level of uncertainty or risk associated with the outcome of a policy, plan or program" During the screening an analyst should "identify the direct and indirect outcomes associated with implementing of a proposal; and consider whether these outcomes could affect any component of the environment" (Sadler 2005). These criteria are based on the requirements of the Directive.
Czech Republic	Strategies, policies, plans and programmes that are prepared or adopted by public authorities and set a framework for activities that require EIA or that are co-financed by the EU (Sadler 2005)	Criteria for the fact-finding procedure (according to Annex N 8 to Act N 100/2001 Coll. of the Czech Republic). (full text of criteria - *Box 4*).	Screening starts when PPPs are "are prepared or adopted by public authorities". Fact-finding procedure as screening. "Fact-finding procedure determines the need for SEA" and specifies the scope

			of the report. Carried out by SEA supervising authority within 35 days from the moment of notification about the development of a concept. Screening decision is publicly available. On the basis of EU SEA Directive
New Zeeland	All plans and policy statements (specified in Schedule 4, of the Resource Management Act)	"Effect on environment", including: • **positive or adverse effect** • temporary or permanent effect • past, present or permanent effect • cumulative effect • potential effect of high probability • potential effect of low probability which has high potential impact	---
Denmark	**Bills proposed for the parliament, proposals and ministry budgets** (Chaker at al. 2004), country and municipal plans	Significance of environmental environmental, health, security, welfare and **cultural heritage impacts**. The level of significance defines the scope for the assessment	Screening is applied on the "proposal" stage. SEA is mandatory for Defined PPPs. Checklists are used for screening. Screening also defines the scope of assessment.
Ireland	Policies agriculture, energy, tourism, education, health, national heritage	Environmental effects, degree of setting the framework for projects and other activities. (full text of criteria - *Box 5)*	"The authority responsible for drafting the policy, plan or program was obliged to determine the need for SEA"

Finland	State action plans and economic strategies ("Must include statement about their environmental effects"), policies on taxation, payment, and subsidies, plans and programmes related to the environment, land use, energy, transport, industry, forestry and agriculture, budgets, action plans and governmental bills. (Sheate et al 2001)	Environmental significance is defined as a criteria. More restrictive additional criteria are set under the SEA Directive – "a plan, Programme or policy should set the framework for the consent of projects"	"The authority responsible for drafting the policy, plan or program was obliged to determine the need for SEA". Screening is carried out on the stage when "the preparatory work was initiated" Governmental bills undergo case-by-case examination under the requirements of the SEA Direcitve. Discussion around the criteria are taking place nowadays.
Netherlands	**Environmental test (E-test):** "Draft regulations (new bills, general administrative orders or ministerial decrees and orders and amendments) and policy intentions sent to the Cabinet" (Sheate et al 2001)	"Side effects on trade and industry, the environment, the judiciary or implementation organizations" (Sadler 2004)	E-test is considered as screening. It is applied on the "introduction" stage of PPPs.
Hong Kong	All PPP proposals submitted to the Executive Council (Sheate et al 2001 There are differences in the assessment of plans and programme from policies and strategies (Sadler 2004)	Economic, social and environmental considerations	Checklists are used
United Kingdom	Non mandatory policy appraisal, Integrated policy appraisal(IPA): Development plans and spatial Strategies Regulatory impact assessment (RIA "All forms of regulatory proposal – codes of practice, etc" (Sadler 2005) Mandatory SEA	Environmental, economic and social impacts. Governmental policy on sustainable development	Screening in a form of "assess the proposal against the c of questions in IPA guidance" (DTLR 2002)

	(under SEA Directive): Screening list – certain PPPs In sustainability appraisal: Regional and local land use/spatial plans		
Norway	Policy and legislative proposals. "All matters encompassed by the Instructions for Official Studies and Reports that may have a significant impact on the environment" (Instructions for official studies and reports in Norway, 2003)	Significant impact on the environment; **possible "influence on the important driving forces for environmental change"** (Sadler 2005)	**Screening in each case is conducted by the body responsible for initiating the particular matter involved** (Instructions for official studies and reports in Norway, 2003) Checklist is used to define the need for assessment
Italy	Regional development plans pursuant to structural funds, plans and programmes in the Valle d'Aosta region and their modifications. (Sheate et al 2001)	Sustainability	Screening in a form of simple matrix which check parameters for sustainability
Portugal	Regional development plans, spatial plans listed in the Spatial Planning Act	Criteria are based on the significance of environmental, social and economic impacts	SEA is non-systematic
Spain	Regional development plans, structural fund programmes; In Castilla-La Mancha: Plans and programmes on watering, agricultural or cattle-keeping development or transformation, forestry, wastes, wastewater treatment, land planning, industrial, energy, mining, roads, transport, hydraulic works and tourism (Law 5/1999); In Castilla y León: Mandatory for PPPs in forestry,	Was not accessible	**Screening practice vary from region to region in a country**

	tourism, agriculture, cattle-keeping, industria energy, mining, roads, transport, land use planning, industrial wastes, urban wastes, cattle-keeping, hospita wastes <u>Basque Country:</u> "Land-use plans, sectoral territorial plans and other plans and programmes with territorial impacts urban land-use plans and their modification affecting non-urban lands, subsidiary norms for planning and their modifications which affect nonurban lands, special plans and their modifications which affect non-urban land" (Law 3/1998 on Environmental Protection) <u>(Article 19 of Law 8/1994)</u>		
Hungary	Plans and programmes: 1. Spatial plans 2. Urban structural plans and building codes 3. National Development Plan 4. Operational programs of the National Development Plan 5. National, regional, county, local waste management plans, combined waste management plans of local administrative units 6. The medium-term agricultural policy plan 7. Water management national concept and national programs 8. Catchment basin management plans 9. National, local road network development plans	Environmental significance and the criteria of "setting the framework for future development consent of projects" listed in the Hungarian EIA legislation" Adverse effects on Natura 2000 sites	Screening is built on the requirements of SEA Directive.

Box 4. *Criteria for the fact-finding procedure in Czech Republic*

1. The content of the conception, particularly in relation to:

a) effectiveness of the determined variant approaches for the accomplishing of the pursued objectives of a conception;
b) extent to which the conception sets the framework for plans and other activities, either with regard to their location, nature, extent and operating conditions or in terms of the requirements for natural recourses;
c) extent to which it influences other conceptions;
d) significance of the conception for the incorporation of the requirements for the protection of the environment and public health, particularly in relation to the support of sustainable development;
e) impact of the conception on sustainable development of the affected territory (including social and economic aspects);

f) problems of the environment and public health that are important for the conception;
g) significance of the conception for implementation of the requirements arising from the regulations of the European Community governing the environment and public health (for instance plans and programs in the field of the waste management or the protection of waters).

2. Characteristics of impacts of the conception on the environment and public health and characteristics of the affected territory, particularly in relation to:

a) probability, duration, frequency and reversibility of the impact;
b) cumulative and synergic nature of the impact;
c) transboundary nature of the impact;
d) risks for the environment and public health arising from the implementation of the conception (for instance in the case of disasters, accidents);
e) seriousness and extent of impact (number of the population which is likely to be affected);
f) importance and vulnerability of the area which might be affected, in relation to:

- special natural characteristics or cultural heritage;
- population density and the level of urbanization;
- breaching the standards of quality of the environment or exceeding the limit values;
- quality of soil and intensity of its use;

g) impacts on areas or landscape with the recognized status of protection at the national, Community or international level.

Box 5. *SEA screening criteria in Ireland*

1. The characteristics of the plan having regard in particular to:

1.1. The degree to which the plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions, or by allocating resources;
1.2. The degree to which the plan influences other plans, including those in a hierarchy.
1.3. The relevance of the plan for the integration of environmental considerations, in particular with a view to promoting sustainable development.
1.4. Environmental problems relevant to the plan.
1.5. The relevance of the plan for the implementation of European Union legislation on the environment (e.g. plans linked to waste management or water protection).

2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to:

2.1. The probability, duration, frequency and reversibility of the effects.
2.2. The cumulative nature of the effects.
2.3. The transboundary nature of the effects.
2.4. The risks to human health or the environment (e.g. due to accidents).
2.5. The magnitude and spatial extent of the effects (geographical area and size of population likely to be affected).
2.6. The value, and vulnerability of the area likely to be affected due to:
(a) special natural characteristics or cultural heritage;
(b) exceeded environmental quality standards or limit values;
(c) intensive land use

2.7. The effects on areas or landscapes which have a recognised national, European Union or international protection status.

Source: Article 13, Planning and Development (SEA) Regulations 2004

Particularly interesting is the difference in the SEA application to the legal documents. National screening practices are diverse in this meaning. For example, Denmark applies environmental assessment to bills and regulations, Finland to laws, decrees and resolutions, Hong Kong to draft legislation and regulations, Canada applies EA to broad legal acts, the Netherlands to bills, administrative orders or ministerial decrees, Norway

to draft bills to Parliament, USA to draft legislation and so on. Such countries as, for example, Western Australia, Australia, Poland, New Zeeland and Czech Republic do not practice EA application to legal documents (Sadler 2005)

Evaluation of international SEA screening practice shows that most of the countries under analysis take "the significance of the potential effect on the environment" as a core basis for the development of SEA screening criteria. Greater variety is observed among the accepted screening approaches, definition of strategic actions which can be potentially and object to SEA, institutional framework and in the screening procedure per se. Sadler (2005) believes that at present time there are very few national systems which practice SEA "on a comprehensive, uniform and government-wide basis to all policy-level proposals with potentially significant effects on the environment"

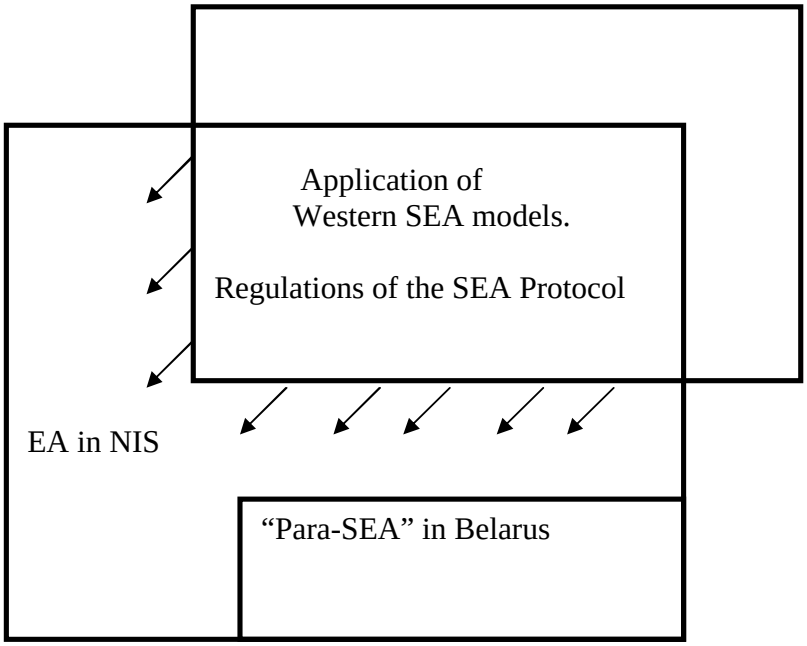
2.6 SEA SCREENING IN NEWLY INDEPENDENT STATES

The Newly Independent States (NIS) are the modern countries of the former Soviet Union.

In the framework of this thesis, the study of screening practice in NIS needs special attention due to their close connection to Belarus – the country of particular interest for this research. On the one hand, Belarus is characterized by common past in environmental assessment with other ex-soviet states. Belarusian EA practice and theory lays "inside" the field of EA in NIS (Belinger et al. 1999; Dalal-Clayton and Sadler

2004). On the other hand, some of the newly independent states are implementing successful western SEA practices in their national context and setting up the preconditions for the implementation of the SEA Protocol (this situation is, in fact, very similar to Belarusian context). Thus, evaluation of SEA screening practices in NIS is a good opportunity to examine incorporation of SEA provisions into a context resembling Belarusian. For better visually interrelation of SEA screening theory and practice in NIS and Belarus in graphically presented in the *Scheme 7.*

Scheme 7. *SEA in NIS*



Apart from that, examination of screening practice in NIS contributes to the development of generic SEA screening criteria and gives useful hints for the analysis of possible challenges of screening system development in Belarus.

Study of screening practices in NIS in the framework of this chapter does not include Belarus. Assessment of screening system in Belarus with further development of contextualized screening criteria are presented in the *Chapter 4.*

2.6.1 ENVIRONMENTAL ASSESSMENT IN NIS: THE COMMON PAST OF INDEPENDENT COUNTRIES

The introduction of first environmental assessments in NIS is dated by the mid-1980 whereas now almost all Newly Independent States have their environmental assessment system or its analogues (Dalal-Clayton and Sadler 2005). Many modern EA systems in post-soviet countries have characteristics of SEA established in most cases under the extended EIA frameworks (Dalal-Clayton and Sadler 2005). A certain variance is observed in these para-SEA systems, though they all have similar features resulting from the common background – they all are based on the state environmental review system (SER)[6], inherited from the Soviet Union. Some countries have already modified their SER systems, some are still running them in the form accepted in the Soviet Union. "SERs are conducted by state environmental authorities or committees appointed by them" (REC 2006). The main aim of state environmental review is to "verify the environmental acceptability of a proposed activity, which in practice often means checking compliance with norms and standards in order to identify and ban "environmentally harmful" activities" (REC and UNDP 2006). SER is applied to "all planned actions including strategic proposals" (Cherp and Lee 1997).

[6] SER is also called ecological expertise.

EIA is practiced alongside with SER and called OVOS [7]. "SER and OVOS regime comprises two interdependent sub-systems" (Cherp 2001). It should be mentioned that SER and OVOS can not be considered as analogues to SEA, however, they form the "initial step" to it.

2.6.2 SCREENING PRACTICES IN NIS

One of the drivers for reforms in EA (SER/OVOS) systems of Newly Independent States is the need for capacity-building for the implementation of the SEA Protocol.

Both SER and OVOS are applied to strategic initiatives. "SER applies to all plan or project documents including, where applicable, the OVOS or EIA report and related materials" (Cherp 2001). Screening system for OVOS and SER is very broad and is lacking a "screening filter". In other words, almost all proposals are supposed to undergo assessment including those, which are unlikely to have significant environmental impacts. This results in high costs, bureaucracy, avoidance and delays and makes the assessment just a formal action. (Klees et al. 2002).

Many strategic initiatives (in the meaning, which is implied by the SEA Protocol and SEA directive) are proposed annually for environmental assessment. However, in practice only those implicating "clear economic development purpose" undergo SER (Jurkeviciute et al. 2006). This is explained by the fact that no notification stage and notification procedure is established for all strategic initiatives and they are submitted

[7] OVOS is a Russian abbreviation for assessment of environmental impacts

directly to the authorized body. Thus, the developer decides if the authorization of the document from the environmental authorities is needed. This situation, largely defined by the absence of clear regulations on the environmental assessment procedure, results in the fact that most of the strategic initiatives “reach authorities without assessment” or become an object for EA “on the final stage of their development” (Jurkeviciute et al. 2006)

Cherp (2001) divides NIS into three blocks according to the state of SEA practice in the countries. Different groups are characterized by variation in screening approaches.

1) The first group includes Ukraine, Kazakhstan, Belarus, Russia and Turkmenistan. They are characterized by reformed SER system. In these countries SER is applied (or formally must be applied) to “all proposals, but, in practice, many strategic proposals are not subject to this procedure” (Cherp 2001). Some authors stress, that there is no such phenomena as screening in the EA systems of these countries (Jurkeviciute 2004)

2) The second group includes Armenia, Georgia and Moldova. These countries made a significant progress towards the establishment of EIA systems as they are recognized in international practice and introduce some “western” EA elements. However, this progress is evident just on paper, but de facto, the countries still apply “SER-based” procedures. The ‘field of application’ for the assessment has “limited coverage of strategic actions” (Cherp 2001)

3) The third group includes Azerbaijan, Kyrgyzstan, Tajikistan and Uzbekistan. These countries still practice SER procedure as it was applied in the Soviet Union. No application of environmental assessment on the strategic level is made.

Definitions of strategic initiatives in NIS differ depending on the national system of strategic planning in each particular case. Dusik and Sadler (2004) mention that all the countries "under the former socialist regime used to operate central planning system". The plans, according to Dusik and Sadler (2004) were divided into "mid-term economic development plans", "long-term (up to 20 years and beyond) sectoral development plans", "short- to long-term land-use plans that imposed detailed conditions for the use of territories". It should be mentioned, that environmental concerns were included mainly into the land-use planning (Dusik and Sadler 2004). At present time, strategic documents in NIS usually include development plans, national policies, laws and regulations, prepared by state authorities.

2.6.3 SCREENING UNDER THE SEA PROTOCOL IN NIS: STATE OF THE ART

Armenia, Georgia, Moldova and Ukraine have already signed the SEA Protocol "and plan to ratify it within the course of the next four years". "Some other Newly Independent States (e.g. Belarus) are now considering possible accession to the SEA Protocol" (UNDP 2006). Thus, as it was mentioned, at present time important reforms in the environmental assessment systems in NIS are largely driven by the necessity of the creation of preconditions for the implementation of the SEA Protocol.

Successful implementation of the screening requirements of the SEA Protocol require, first of all, evaluation of national systems of strategic planning and clear definition of 'plans and policies' which fall under the scope of the Protocol.

Planning processes in NIS are "largely untouched by environmental assessment" (Ukraine, Moldova, Russia). Nowadays, a number of programmes, which lay out of the Protocol scope but may need environmental assessment, are prepared in the countries. These are plans and programmes in the healthcare system, international economic cooperation programmes, "developed by financial institutions and international organizations", for example, Economic Growth and Poverty Reduction Strategies administered by World Bank in Armenia, Moldova and Georgia (Dusik at al. 2006)

For example, in Armenia a clear distinction of strategic documents is defined in the national laws and "the term 'concept' has a clear framework" (Jurkeviciute et al. 2006). Experts believe (and extrapolate this pattern on the countries with similar context) that in this case "the SEA legal framework will need an inclusion of so called non-strategic documents to enable compliance with the Protocol since they may fall under the scope of application of the procedure based on some other criteria identified in the Protocol" (Jurkeviciute et al. 2006). Though it is not defined in the law, at present time Armenia names the following documents that will form the scope of application of the SEA Protocol: "proposals, programmes, complex design schemes, master plans, documentation on regional planning and design of complex natural resource use schemes,

feasibility studies". It should be mentioned, that present "legislation, policies and strategies are not considered as strategic documents" in Armenia (Dalal-Clayton and Sadler 2005).

No definition of PPPs is specified in the national legislature of the Republic of Moldova (Jurkeviciute et al. 2006). According to the opinion of some authors this "enables the country to set up screening based on the concept of the Protocol"(Jurkeviciute et al. 2006).

In Georgia strategic documents include "infrastructural plans, projects and programmes, long term plans, programmes and strategies, five-year plans and programmes and action plans for specific sites and on regional, local and departmental level" (REC, UNDP 2006).

The most successful example of the development of environmental assessment screening system in NIS belongs to the Ukraine. "The World Bank review of SER/OVOS legislation in NIS gave the Ukraine high marks on basic provision and on screening and scoping procedure" (Dalal-Clayton and Sadler 2005).

There is no such term as "plans, programmes and policies" in the Ukrainian legislation, however, mandatory assessment of "documents of strategic nature on development of the national economy" is anticipated by the national EIA Law (Article 1 of the Law on the State Target Programmes). In the framework of introduction of SEA Protocol, Ukraine

specified concrete strategic documents which fall, according to the national legislature, under SEA in the following sectors: agriculture, forestry, fishery, energy, industry, mining industry, transport, regional development, waste management, water management, tourism, territorial and land-use planning (Borysova et al. 2004). “The Country Report on Capacity Development Needs for the Implementation of the UNECE SEA Protocol in Ukraine” classifies same strategic initiatives in another groups according to their purpose -“state aim-specific programmes of economic, scientific technical, social, national and cultural development, environmental protection, other programmes aimed to the solution of specific problems of economic and social development and also of administrative territorial units that require state support”.

Main difficulties in the establishment of screening process for strategic environmental assessment arise from the fact that in some countries strategic actions are not distinguished from the project level activities. The fact that the same type of assessment is applied on the project and on the strategic decision-making levels sophisticates the definition of screening criteria when the screening itself is common for all these actions.

3 GENERIC SEA SCREENING CRITERIA

On the basis of the literature review, analysis of legal documents, country reports and other sources listed in methodology (*Chapter 1, Section 1.5*) and taking into account the main findings of the study of international SEA screening practices, a generic SEA screening criteria (GSSC) are developed. It is important to outline that GSSC are not aiming at comprehension of all known screening criteria, but at building a set of model principles/requirements for an abstract SEA screening system. Thus, GSSC include accumulative criteria generalized from the considered national SEA screening experience of various countries and accomplished by the extractions from 'criteria for effective screening' proposed in the literature. 'Model' requirements of GSSC do not provide a panacea for all specific problems which may accompany SEA screening in a country. GSSG gives just main directions and principles to be addressed and interpreted on the national level. Thus, GSSC is not a solution for any national screening problem but a guide on finding the solution.

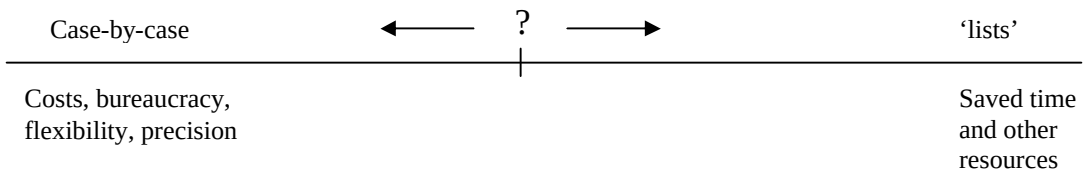
GSSC are a set of requirements to be fulfilled in order to form an **effective, efficient and legitimate** screening system. An effective screening system a system which is successful in the implementation of its objectives [8]. An efficient screening system is a well-functioning system.

The main dilemma (*Scheme 8*) of the establishment of a SEA screening structure is concluded in the finding of proper balance between the costs and level of precision. On

[8] Main objectives of screening are discussed in the*Chapter 2*

practice, with a certain degree of simplification, it can be assumed that on the one hand the 'case-by-case' examination approach provides the highest precision, best flexibility, allows to apply very individual examination when it is needed, but on the other hand this approach can initiate high level of bureaucracy, high costs and require a lot of time and other resources. The screening approaches based on the defined 'lists' will, on the contrary, save time and money, but unfortunately will not guarantee high precision and flexibility. And if precision can be increased by the development of extremely detailed and extensive lists, the flexibility still can be hardly achieved.

Scheme 8 *The screening dilemma*



Effective and efficient system of SEA screening is such a system which can achieve its objectives with the highest possible level of precision and lowest possible costs and minimal bureaucracy.

The requirement of legitimacy is fulfilled by the **completeness and conformity of the screening with the SEA Protocol [9].** The provisions of the SEA Protocol supplemented by other requirements described below form a 'skeleton' for an effective and efficient screening system.

[9] Compliance with the SEA Protocol implies compliance with national laws as ratification of international agreements requires reformation of national legal system in order to bring it to conformity with these agreements.

The clauses of the SEA Protocol in the field of screening were examined and discuses in the *Chapter 2* (2.4). To recall briefly, the SEA Protocol defines that the screening criteria should be justified by the significance of environmental effects of planned strategic activity. Thus, screening should be applied to:

- Concrete activities defined in the SEA Protocol
- Strategic activities which lay the foundation for the development of other activities which in their turn require environmental assessment according to the national legislature
- Activities considered by case-by-case examination (by national experts) as those which may have significant environmental impact

In other words, **screening should take into account the nature of effects and characteristics of PPPs**.

GSSC are presented in the **Table 3** below and supplemented further with clarifications for each of its clauses. The tables also contains references to the source of ideas (discussed in this thesis) which helped development clauses of GSSC.

Table 3 *Generic SEA screening criteria*

§ Efficiency, effectiveness and legitimacy **§ Completeness and conformity with the SEA Protocol** • Screening should take into account nature of effects and characteristics of PPPs	
A. All strategic initiatives which can have significant environmental	**A. Strategic initiatives which are unlikely to have environmental impacts or likely to**

impacts should undergo SEA	**have very insignificant impacts should not undergo SEA**
(George 2000; Therivel 2004; Sommer 2005; the SEA Protocol)	
Significance to be defined on the basis of - criteria contained in the SEA Protocol - criteria defined on the national level - opinion of experts in "case-by-case" examination	
B. The 'field of application' should be clearly defined (Sadler 2005; Sommer 2005; The Resource Manual 2007)	
B1. The 'field of application' should include also modifications of strategic initiatives defined as object for screening	
C. Adequate procedure for screening (Therivel and Partidario 1996; Sommer 2005; Cherp 2001; Lee and George 2000)	
C1. Screening must be applied opportunely	
C2. Screening must be characterized by usability and require reasonable efforts	
C3. Balance between cost and precision should be kept	
C3.1. "Negative lists" should be used	
C3.2. Quick decisions should be possible for "routine" cases (pre-screening, simple check list)	
C4. The screening application time and procedure should be clearly defined in the law	
D. Screening criteria must have univocal interpretation	
E. Screening system must be flexible (Cherp 2001 ; Cherp 2007(personal communication) ; Sommer 2005)	
E1. Screening should be applicable to individual 'unusual' cases	
E2. Screening system should allow updates	
E2.1. React on changes in the 'field of application'	
E2.2. Adapt to changes in the SEA system	
F. Screening should be applied uniformly	
G. Acceptance of screening system	

H. Screening should be independent from whose who carry it out (Sommer 2005)	
I. Screening must be transparent and traceable. **Experience should be used for the improvement of screening system** (Lee and George 2000)	
J. Screening should be performed of the systematic basis (The SEA Protocol, the SEA Manual 2007)	
K. To address the requirements A, C, E and F screening system should: (Cherp 2001, Lee and George 2000, Sadler and Verheem 1997).	
K1. be based on the combination of 'case-by-case' and 'lists' approaches	K2. consist of *pre-screening* and screening stages.
L. Screening should not require radical modification of the system strategic planning in a country	

Effective and efficient screening system should form a 'screening net' which, figuratively speaking, must 'catch' (define as requiring SEA application) **all strategic initiatives which can have significant environmental impacts** and 'let through' (define as not requiring SEA application) all strategic initiatives, which are **unlikely to have environmental impacts or likely to have very insignificant impacts (A).** The responsibility of definition of *environmental impact* and the *significance of environmental impact* rests on the country where the screening system is developed. The definition can based on the

- Criteria contained in the SEA Protocol
- Criteria defined on the national level
- Opinion of experts in each "case-by-case" examination

Further, **the 'field of application' [10] for SEA should be clearly defined (B).** Implementation SEA screening requires careful analysis of the system of strategic planning. Strategic initiatives developed in a country should be described and categorized to eliminate clustering of strategic and project-level activities. **The 'field of application' should include also modifications of strategic initiatives defined as object for screening (B1)**.

Generic SEA screening criteria require an **adequate procedure for screening (C).** The definition **'**adequate procedure' is explained by the following provisions:

- **Screening must be applied opportunely (C1)**

  Opportune application means that screening should be applied on the proper stage of the development of strategic documents, namely, early enough (preferably to a concept/proposal of a document) to ensure the possibility of modification of this document in accordance with the results of SEA (if the need for SEA is defined due screening)
- **Screening must be characterized by usability and require reasonable efforts (C2)**

  Screening system should not be over sophisticated so the experts could understand and apply its provisions at the price of reasonable efforts.

- **Balance between cost and precision should be kept (C3)**

[10] The definition for the 'field of application' for SEA is given in the*Chapter 2* (2.4.1)

The most comprehensive screening system would include case-by-case detailed consideration of all PPPs produced in a country. On practice, as it is repeatedly discussed, it is hardly possible due to numerous reasons. Each country developing national requirements for SEA screening must decide upon the most appropriate balance between the cost of case-by-case examination and the necessity of its application. This is elaborated in the following statements:

- **'Negative lists' should be used (C 3.1)**

  'Negative lists' should include strategic initiative which are unlikely to have significant environmental impacts and do not require SEA. Alongside with 'positive lists' 'negative lists' will help to avoid bureaucracy, reduce time needed for screening and make it more efficient.

- **Quick decisions should be possible for "routine" cases (pre-screening, simple check list) (C 3.2.)**

  In order to reduce the costs and time of screening a simplified screening procedure should be introduced for certain cases. Simplified procedure can be applied to the documents defined in the 'negative lists' and to documents-analogues[11] of the initiatives which have already experienced successful application of SEA, etc.

Further**, screening application time and procedure should be clearly defined in the law (C4).** In order to secure opportune application, exclude avoidance and ensure the

[11] This issue needs careful consideration and definition on the national level

observation of defined rules of screening by responsible authorities, the procedure should be supported by national law and foresee sanctions for its violation.

To avoid purposeful or unpurposed misinterpretation and, as a result, misapplication **screening criteria must have univocal interpretation (D).** Univocal interpretation can be ensured by the supplementation of screening regulations with guidelines, advisory and explanatory work with screening experts, etc

One of the most crucial provision of GSSC is the **flexibility of a screening system (E)** expressed in the following:

- **Screening should be applicable to individual 'unusual' cases (E1)**

  Though desirable, but on practice it is not possible to anticipate all the cases of screening application. For example, in the cases when it is hard to define the 'nature' (strategic or project-level) of a planned activity, SEA screening still should be applied with further identification of the type of assessment needed (if necessary). This will help to eliminate the cases when, due to uncertain nature, an activity does not undergo nor SEA neither EIA screening and as a result skips EA assessment.

- **Screening system should allow updates (E2),** namely
  - **React on changes in the 'field of application' (E 2.1)** and **adapt to changes in the SEA system (E2.2)**

    A planning system is a dynamic field which reacts on the numerous changes in the social, economic, cultural, environmental and other spheres of a

country. As a result new strategic initiatives which might require different screening approaches can be developed. Therefore, screening system developed once should not remain a 'frozen' mechanism to ensure that newly developed PPPs (which were not foreseen by the accepted screening approach) do fall beyond the scope of its application. SEA system, in its turn, also does not remain immobile and may require reformation of screening to support changed SEA procedure.

Another GSSC clause recommends **uniform application of screening (F)**, which means that same screening approaches should be used in the same cases (applied to the same types of PPPs) in order to generate valuable experience for further improvement of SEA system.

The requirement of the **acceptance of screening system (G)** includes acceptance by

- the developers of strategic documents
- the environmental reviewers

Acceptance of a screening system guarantees higher efficiency of its application. Measures for promotion of acceptance should be developed on the national level after a careful analysis of context. The context includes, for example, 'thinking' of officials, their readiness and willingness to introduce SEA screening, general opinion about the necessity of SEA, ideas of "ideal" screening, etc

It is significant, that personal interests should not influence the results of screening. Thus, **screening should be independent from those who carry it out (H).** On practice, this means that screening must be conducted by institutions/experts which do not benefit personally from the results of screening. State body responsible for application of SEA should not be at the same time a developer of PPPs being screened.

Establishment of effective and efficient screening system as well as **improvement** of an existing one requires **evaluation of positive and negative screening experience** therefore **screening must be transparent and traceable (I).**

Further, to ensure the application of screening to all initiatives that may fall under the scope of SEA and in that way guarantee the observation of main SEA goals (incorporation of environmental concern into strategic decision-making) **screening should be performed of the systematic basis (J).**

As it is stated in GSSC, to address the requirements A, C, E and F, screening system **should be based on the combination of 'case-by-case' and 'lists' approaches (K1)** and **consist of pre-screening and screening stages (K2)** . Pre-screening should be carried out in the form of a "quick approach" based on the 'lists' of PPPs, check-lists for environmental impact and define the need for screening. Such 'architecture' (arrangement) will allow to reduce the costs and time of application, practice 'individual' approach in selected cases and assure the flexibility of screening system.

The success of the implementation of a screening system depends not only on its acceptance. The implementation of the screening system should require reasonable efforts and resources. That is why **screening should not require radical modification of the system of strategic planning in a country (L).** Screening must be applicable to planning system which exists in a country at the moment of application. Trials to implement SEA screening which requires fundamental changes in the state planning will result in delays, avoidance and finally rejection of such screening system.

4 SEA SCREENING IN BELARUS

At present time there is no established and legally defined SEA procedure in Belarus. The practice of the SEA application is limited by the several pilot SEAs, namely SEA of National Program for Tourism Development for the period until 2010 and the SEA of Concept of Sustainable Socio-economic Development of the Republic of Belarus for the period until 2020. Thus, SEA in Belarus exists in the form of a para-SEA [12] when some SEA elements are incorporated into state environmental review system. However, the need for the development of SEA system and its incorporation into strategic planning is recognized by the state authorities and defined in the National Strategy of Sustainable Socio-economic Development of the Republic of Belarus (NSSD). NSSD dictates the strengthening of socio-political mechanisms of sustainable development by means of strategic environmental assessment.. Moreover, as it was mentioned previously, Belarus is building the capacity for the implementation of the SEA Protocol.

In the framework of this research elaboration of the requirements for the effective and efficient SEA screening system in Belarus is made by means of application of GSSC in the Belarusian context with regard to specificity of this context and the challenges which this application may face.

Introduction of the generic sea screening criteria in the Republic of Belarus requires, first of all, examination of the structural elements of the context, namely the current

[12] Para-SEA, according to the definition of Sadler (2005) is a system of "processes and elements, which have the same function as formal SEA processes but only some of their characteristics".

environmental assessment system in the country and state system of strategic planning. It is necessary to find out if the current EA screening system in Belarus contains features and principles of SEA screening. That is why it is essential to define the 'field of application' for national EA. Since all strategic initiatives developed in a country should, according to the SEA Protocol, become a subject for the application of SEA screening it is important to analyze the system of state strategic planning, define the types of strategic documents and find out which of them fall under the scope of the national EA system and which remain beyond.

4.1 THE SYSTEM OF STRATEGIC PLANNING IN BELARUS

SEA screening system in a country should be inseparably interconnected with the system of state strategic planning. The planning 'architecture' defines main screening approaches in a selected context as exactly the functioning of state planning system creates and shapes the 'field of application' for strategic environmental assessment. In order to fulfill the main objective of SEA (incorporation of environmental concerns into decision-making process) and address the requirements of the SEA Protocol, screening must consider all (except some types of programmes such as military or budget ones) strategic initiatives being developed in a country. Thus, to fulfill the aims of this research (*Chapter 1, Section 1.2*), in-depth examination of the planning system in Belarus with classification of strategic documents elaborated is needed.

The analysis of the planning system of the Republic of Belarus faces a number of difficulties. First of all, there is no well-developed juridical description of planning process in Belarus. It is hard to discover the allocation of responsibilities and authorities among the state bodies in the planning process. At present time, there is no single legal document or systematized set of legal documents describing strategic planning. In the Belarusian planning scheme same definitions do not always mean the identical type of documents with the same status, similar aims and same legal force and, vice versa, unlike terms can denote the same activity. For example, the common term 'programme' is used for periodical strategies such as the National Strategy for Sustainable Development, for national programmes for socio-economic development, sectoral investment programmes and ad-hoc programmes "developed by onetime instructions from the Government or the President" and programmes "developed by sectoral Ministries on their own initiative" (Cherp 2001). Yet, these types of programmes are joined under the same notion of 'socio-economic forecast'.

The following uncoordinated legal documents, which in fact do not cover all types of strategic initiatives, regulate strategic planning in Belarus:

- The Law on the National Forecasting and Programmes of Socio-economic Development of the Republic of Belarus (1998) (further – the Law on Forecasting)
- The Regulation on the Procedure of Forming, Financing and Execution National Economic and Social Programmes (2004, amended in 2005) (further – the Regulation on Economic and Social Programmes)

- The Law on the Architectural, City Construction and Building Activity in the Republic of Belarus (2004) (further – the Law on Construction)

In general, the types of strategic documents defined in the national legislature in Belarus include forecasts, concepts, schemes (plans), programmers and strategies (which are sometimes also called programmes or forecasts).

Strategy is a document defining long-term development objectives and main principles of their achievement. At present time there is a number of state strategies accepted in the Republic of Belarus. For example, National Strategy for the Development and Management of the System of Conservation Areas (till 2015), National Strategy for the Reduction of Emissions and Increase of Absorption of Greenhouse Emissions (2007-2012), National Strategy and Action Plan for the Conservation and Sustainable Use of Biological Diversity of the Republic of Belarus, National strategy of sustainable socio-economic development of the Republic of Belarus (till 2020). Strategies are developed by the Council of Ministers or sectoral Ministries (with approval of the Council of Ministers).

Forecast is a system of scientifically defined conceptions about directions, criteria, principles, objectives and priorities of socio-economic development of the Republic of Belarus. Forecasts usually include main predictable indicators in the field, target benchmarks and measures. Forecast is intended for a certain period and contains a set of goals and arrangements for their achievement. The system of state forecasts includes

socio-economic forecasts for long-term perspective, medium-term perspective and short-term perspective . The forecasts for long-term perspective include National Strategy of Sustainable Socio-economic Development of the Republic of Belarus and main Directions of State Socio-economic Development for 10 years, for medium-term perspective – the Programme for National Socio-economic Development for 5 years and for short-term perspective – 1 year Forecast for State Socio-economic Development. The elaboration of socio-economic forecasts is carried out by the Council of Ministers of the Republic of Belarus. Fort-term forecasts are approved by the President of the Republic of Belarus.

Programme is a complex (with common resources, executors and terms of realization) of production, organizational, economic, social, scientific and engineering and other activities which promote its aims and objectives in various fields. Programmes are aiming at the evolution of concrete sectors (sub-sectors, braches) of national economy end social life and solving of main problems in selected courses of economic and social development of the country.

According to the Regulation on Economic and Social Programmes (2004), programmes can be divided into:

- **Economic programmes**, aiming at solving main intersectoral problems or/and sectoral problems in the field of industry, at the increase of the production efficiency as well as at the rational utilization of labor, financial and material resources, creation and development of new types and sectors of production.

- **Social programmes**, aiming at solving national problems in increase of living standards, improvement of work conditions, health case, educational systems and other branches of social spheres.
- **Environmental programmes**, aiming at solving main environmental problems in the country
- **Scientific and engineering programmes** are aimed at solving united scientific and engineering, environmental or social problems.
- **Scrotal investment programmes**, **ad-hoc programmes,** developed by onetime Instructions from the Government or the President of the Republic of Belarus
- **Other sectoral programmes** developed by sectoral Ministries and approved by the Council of Ministers (in agriculture, forestry, fishery, tourism, energy, etc)

The development, organization and monitoring of the execution of programmes is fulfilled by their state requesters, which are defined by the Council of Ministers. State requesters can include state governmental bodies (such as sectoral Ministries: the Ministry of Economy, the Ministry of Agriculture, etc), other organizations subordinate to the Government of the Republic of Belarus, the Office of Public Prosecutor of the Republic of Belarus, National Academy of Science of the Republic of Belarus and regional executive committees. Programmes are approved by the Council of Ministers and realized with the governmental support.

The term **'policy'** is not defined in the Belarusian legislature though in fact policies are elaborated (for example, City Construction, Architecture and Building Policy, State

Demographic Policy, State Socio-economic Policy, State Scientific and Technical policy, etc). In Belarus policies are represented as a set of objectives for a development of a certain field. The provisions describing a policy in the same field are often found in separated legal documents. For example, the state environmental policy in the field of environmental protection is determined partially in the Law on Environmental Protection (1992) and partially in the Decree of Supreme Soviet on the State Policy on the Environmental Protection (1995). Policies in Belarus are not included in the 'field of application' for EA and not recognized as a potential subject to SER and SEA. The place of policy in the hierarchy of strategic documents is also not clear. In some spheres main objective of policy lay foundations for the development of schemes and plans (City Construction, Architecture and Building Policy outlined in the Law on Construction), in some – policy is framed by the forecasts and programmes (National Socio-economic Policy outlined in the Law on Forecasting).

When studying the 'field of application' for SEA in Belarus, the notion of **'concept'** needs to be discussed. Though the term 'concept' is widely used in the national legislature in Belarus, there is no legal definition for it. In some cases concept is understood as a type of a legal document (Law) and in some cases as a pre-planning state of a strategic document. In the second case concept should be considered as a subject for SEA[13]. At present time 128 concepts – legal acts are accepted in Belarus.

[13] In some countries legal documents fall under the scope of SEA, however, in some countries SEA of laws is not accepted. For more information see the*Chapter 2* (2.5) of this thesis

The term **'plan'** alongside with **'scheme'** is mainly used in strategic planning in the field of construction (city-construction, architecture, building activity). The planning activity in construction is defined as "preparation and approval of state and sectoral programmes in the field of architecture and city-construction, city-construction projects, plans for territorial zoning" (the Law on Construction). **Construction 'plan'** (scheme) is a "system of interrelated project documents defining the directions and conditions of city-construction development and use of unpopulated settlements, populated settlements and their parts" (the Law on Construction). Construction planning is executed on the several levels:

- State level includes planning for the whole territory of Belarus or two and more regions
- Regional level embraces planning for the territory of region or group of districts
- Local level includes planning for the territory or a part of a territory or a district, settlement or its part

State strategic planning in the field of architecture, city-construction and building is conducted and executed by the President of the Republic of Belarus, the Ministry of Architecture and Construction, local executive and administrative bodies, local Deputy Councils, architectural city-planning councils.

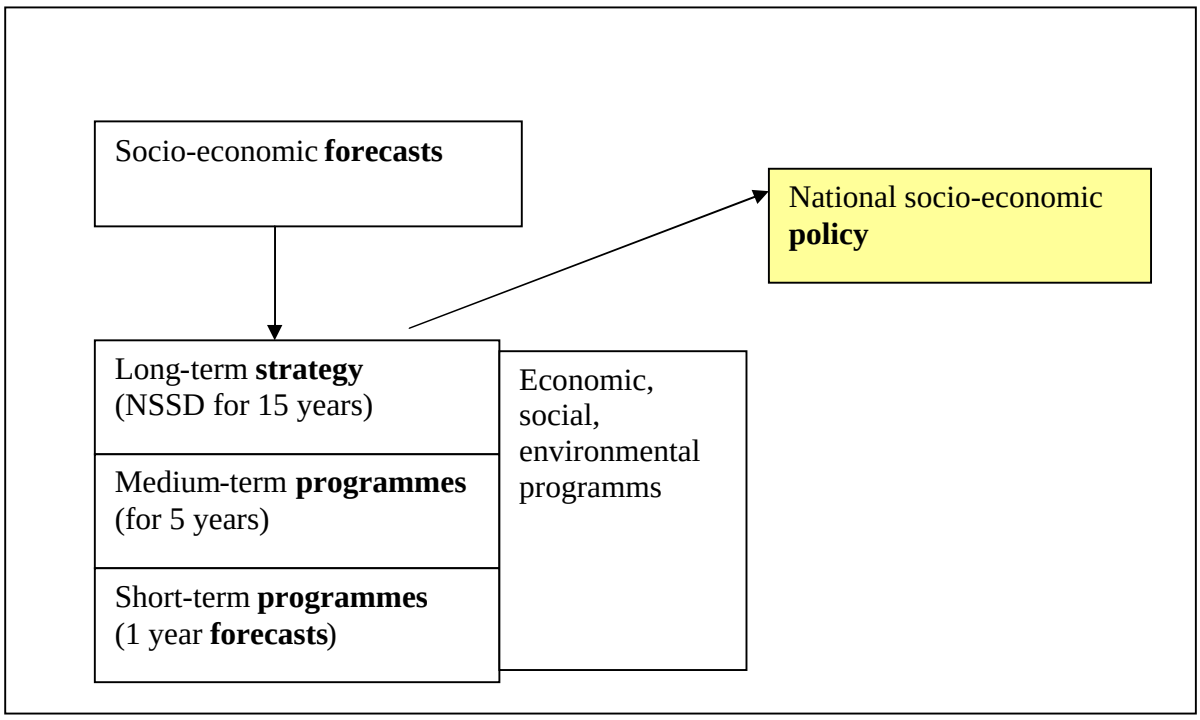
The procedure of development and approval of strategic document vary depending on the type of the initiative, state client (requester), that requests the development, the field of

application of this document and others. However, in most cases a strategic initiative in Belarus (before it becomes an approved document) is going through the following stages:

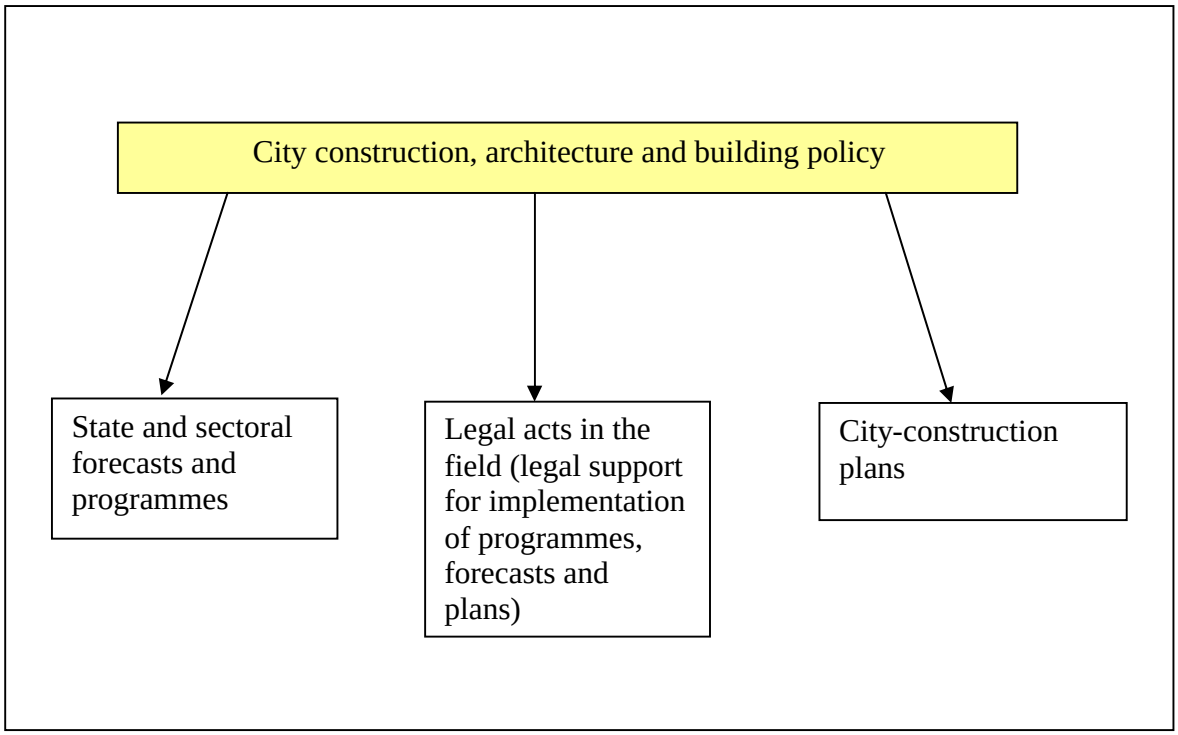
- Decision of state governmental body about the development of strategic document, definition of organization responsible for its development, forming of the group of developers.
- Development of a concept of a strategic document which can possibly include discussion and approval of strategic document.
- Development of draft (project) of strategic document by a group of developers
- Consideration of draft of strategic document by organization responsible for its development and direction for the approval/negotiation
- Negotiation of the draft with governmental stakeholders and organizations
- Revision of the document
- Approval of strategic document

The whole hierarchy of strategic documents if the Republic Belarus is a complicated issue which defies any patterning. It extremely hard to compare legal forces of strategic actions as this question is not elucidated in the law. It is also difficult to follow the interrelations between strategic initiatives, in other words it is hard to track which type of strategic document in a certain field lays the foundations for the development of other documents. This issue is especially complicated by the described above problem of overlapping definitions. On the *Scheme 9* and *Scheme 10* an attempt to structure strategic initiatives (in selected fields) and find interrelations between them is made.

Scheme 9. *National socio-economic development*



Scheme 10. *Architecture, city-construction and building*



Thus, as it is shown on the *Scheme 9* socio-economic forecasts are presented in a form of long-term strategies, medium- and short-term programmes. These strategies and programmes lay the foundations for the development of various types of economic, social and environmental programms (discussed above). Long-term strategies (NSSD) form national socio-economic policy.

In the field of architecture (*Scheme 10*), city-construction and building the pattern is slightly different. In this case city construction, architecture and building policy is defining the development of state and sectoral forecasts and programmes, city-construction plans (schemes) and legal acts.

And in conclusion, it should be mentioned that **at present time** legal acts in the Republic of Belarus are not considered as hypothetical 'field of application' for SEA nor by national developers of SEA capacity neither by international experts (UNDP, REC 2006). Basically, such view is explained in many respects by the complete absence of the perspective of application of SEA to the mentioned documents due to the current political system in the country.

4.2 SYSTEM OF ENVIRONMENTAL ASSESSMENT IN BELARUS. EA SCREENING

The development of environmental assessment system and selection of the activities, which fall under its scope during the soviet period, is covered in the *Chapter 2*, *Section 2.6.* This period paved the common way for the evolution of EA systems in all Newly

Independent States including Belarus. The present chapter focuses on the current state of the national EA screening system in the Republic of Belarus which started its individual development after the collapse of the Soviet Union in 1991.

Modern system of environmental assessment in Belarus consists of two interrelated branches:

- **State Environmental Review** (SER)
- **Environmental impact assessment** (EIA or OVOS)

Environmental assessment system (SER and OVOS) in the Republic of Belarus is regulated by the following legal documents:

- Law on Environmental Protection (1992, amended in 2002);
- Regulation on the Procedure for Environmental Impact Assessment of Economic and other Activities in the Republic of Belarus (2005) (further – The Regulation on EIA);
- Law on State Environmental Review (1993, amended in 2000) (further – the Law on SER);
- Regulation on the Procedure of State Environmental Review (2001, amended in 2005) (further – the Regulation on SER).

State Environmental Review in the Republic of Belarus can be defined as a scientific and practical type of action which is realized on the pre-project stage of reviewed activities and aimed at the determination of types of environmental impacts as well as on the assessment and forecasting of possible changes in the environment resulting from

these activities. SER examines the correspondence of planned activity with national environmental legislature (The Law on SER in Belarus 1993).

Main **objectives** of state environmental review include:

- The assessment of the sufficiency of measures aimed towards the reduction of the environmental impacts of a planned activity
- Definition of the level of the possible environmental hazard which can originate form the realization of a planned activity
- Prevention of possible negative impacts on the environment which can result from the planned activity

As for **screening** in SER, the **'field of application'** is defined in the Law on SER and the Regulation on SER in the Republic of Belarus. The Regulation on SER contains a full list of project-level activities that require mandatory application of SER. The significance of potential environmental impacts resulting from these activities and reasons of environmental safety are the main criteria for the compiling of these lists. The Regulation also defines a so called 'negative' list which includes economic activities and entities that do not have a significant impact on the environment and thus do not fall under the scope of SER. These lists are formed and approved by the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus. In particular, the following activities require state environmental review (The Law on SER, the Regulation of SER, Cherp 2001):

- Concepts, programmes (including investment programmes), sector and spatial plans for socio-economic development
- Schemes (plans) of complex usage and protection of nature resources

- City construction documentation
- Rationales for investments into building, project documentation for building, reconstruction, expansion, technical re-equipment, modernization, reorientation or liquidation or production of objects regardless of departmental subordination and type of ownership
- Other planned economic activities which *can make an impact* on the environment

'Negative' lists include project-level activities, such as renovation of buildings, replacements of structural units in buildings, replacement of radio systems, etc.

There is no defined procedure for the SER of strategic documents and it is "is carried out on an ad hoc, case-by-case basis by staff of the Ministry of Natural Resources and Environmental Protection" (Cherp 2000b)

Requesters and experts are the main actors of the state environmental review.
Requesters are usually the initiators of planned economic of other activity - individuals and legal entities including foreign ones, performing economic activities on the territory of the Republic of Belarus.
The **experts** executing the state environmental review are the officials of the Ministry of Natural Resources and Environmental Protection and its local agencies. MoEnv is the main responsible state actor in the field of SER. Its main rights and obligations include:

- Organization and application of state environmental review (the Ministry of Natural Resources and its local agencies have exclusive supreme right for the application of united SER)

- Development of main orientations of governmental policy in the field of SER
- Development of guidance and instructions for SER application
- Monitoring of observance of SER provisions (defined in the national law) by individuals and legal entities.
- Other activities defined in the national legislature

State environmental review is a *mandatory* element of the planning process in the socio-economic development. An initiator of economic activity is obliged to submit to a Ministry of Natural Resources or its administrative agencies documents that should contain a report on the environmental impact assessment (OVOS) and measures for the prevention/minimization of possible environmental impacts from this activity. However, when it comes to SER of strategic initiatives a developer has a freedom to decide upon the necessity of the approval of this strategic document by the Ministry of the Natural Resources and Environmental Protection.

On the basis of the results of SER, MoEnv (taking into account potential environmental impacts) is making a positive or negative conclusion about the possibility of realization of a planned activity. If the conclusion is negative, the initiator is obliged to modify the planned activity with regard to the results of SER. Financing and realization of activities which have not received an approval from the Ministry of Natural Resources on the basis of SER is forbidden. In the literature SER is considered as "environmental permitting procedure" (Borysova and Varyvoda 2004).

SER of strategic documents is conducted extremely seldom; it is not a systematic process. During the recent years, some “urban master plans of larger cities” became the objects for SER. As a result, “environmental components of these plans were improved”. SER of National Programme of Industrial Development and informal SER of National Strategy for Sustainable Development in 2003 can be also mentioned as examples of SER application on the strategic level (Cherp 2001). SER is based on ‘engineering’ approaches and ‘technical’ norms and requirements (UNDP 2006). “No guidelines are specified for strategic actions and SER at this level is carried out on an ad hoc, case-by-case basis by staff of the Ministry of Natural Resources and Environmental Protection” (Cherp 2000). Environmental permit, which must be obtained for strategic documents is usually fulfilled in a form of an ‘environmental chapter’ included into the document. Sometimes these chapters even “do not consider environmental implications of the planned activities” (Jurkeviciute et al. 2006). These chapters should include “the description of impacts on a prescribed list of environmental objects”, and sometimes “this assessment is limited to compliance with building codes and measures that are clearly stated in the laws” (Jurkeviciute et al. 2006). In many cases SER is applied very informally and some of its requirements are ignored just because the reviewers “find the application of SER to strategic documents too difficult” or do not have enough information or there are no well-developed guidelines in this field (Jurkeviciute et al. 2006). The process of the development of a strategic document is highly confidential and sometimes even for an environmental reviewer-authority is hard to get access to the information required for the assessment.

At the same time project-level SER is common and quite effective (Cherp 2001). According to the statistics, 3000-4000 SERs are conducted annually. 5-10% of the projects which undergo SER are rejected or changed (Cherp 2001).

On practice, SER often consists of examination of OVOS quality.

Environmental impact assessment is applied to the activities just on the project level. OVOS is a mandatory part of project documentation which should be submitted for the State Environmental Review. The results of OVOS form the background for SER.

In the cases when the results of OVOS are included into the project documentation, they must contain a section about environmental protection, which constitutes a part of the assessment and is directed towards the reduction of possible environmental impacts of the project.

As regards the **screening** in OVOS, the list of projects that require its mandatory application is defined in the Regulation on EIA. The necessity of environmental impact assessment of the projects not included into the list is defined by MoEnv. In the case when a developer of a project does not agree with the decision of MoEnv and refuses to conduct EIA, the final decision remains in the competence of the Ministry.

OVOS is initiated and organized by a project developer and conducted *simultaneously* with the development of project documentation. The results of OVOS should be a part of project documentation.

Thus, projects in Belarus undergo screening twice – there is a list of actions, which require mandatory EIA application, and another broader list of projects-subjects to SER. Some projects, which are not subjects for EIA, are subjects for SER or "an official approval from the environmental authority" (REC 2006). Screening requirements for SER (defined in the law) recognize strategic-level initiatives (concepts, programmes, schemes for sector and territorial social and economic development, schemes of complex use and protection of nature resources, and city construction documentation) as a subject for SER application, but since there is no procedure for EA of strategic documents established in the country, on practice strategic initiatives do not undergo screening. The main authority responsible for EA screening in Belarus is the Ministry of Natural Resources and Environmental Protection.

Thus, environmental assessment of documents of strategic level in Belarus exist mostly on paper. On practice, territorial plans are the only ones whose development process incorporates the elements of pare-SEA with a territorial approach. This kind of assessment is aiming at the measuring of the anthropogenic pressure on the territory of the future site development. This assessment approach is applied only in the city-construction strategies and can not be extrapolated on other fields of strategic planning (Misiuchenko 2007). No other strategic documents include EA in the procedure of their development and can become an object to SER only on the stage of an approved document, which can be hardly modified.

4.3 CHALLENGES FOR THE IMPLEMENTATION OF SEA SCREENING SYSTEM IN BELARUS

The analysis of the background for the implementation of SEA screening in Belarus was made in the previous chapters. It revealed a number of challenges for application of GSSC provisions in the institutional, system and human frameworks of the examined context. The division of challenges into those which belong to system, human and institutional capacity is conditional and introduced for better structuring of the information. On practice, all challenges and barriers are interconnected by mutual causality.

1) <u>System capacity</u>

System capacity can be defined as "frameworks within which institutions and individuals operate" (Jurkeviciute and Dusik 2004). In particular, it includes organization of state planning system, 'field of application' for SEA, current EA system, procedural arrangements, laws in the field, etc.

When considering system capacity for implementation of SEA screening in Belarus the following difficulties must be pointed out:

- **Merging or project and strategic level actives into one category and clustering of EA requirements (strategic and project level EAs are not separated).**

  Strategic activities are not defined as a separate category in the planning system of Belarus. The initiatives developed in the country on the project and strategic

level are not divided from each other. They form one mixed 'field of application', one category for the environmental assessment. Both project- and strategic-level documents are supposed to undergo the same "environmental permitting" procedure (SER), though in fact SER is applied only on the project-level. Thus, there is no distinction between strategic and project-level environmental assessment in Belarus. This complete "clustering of EA requirements" (Jurkeviciute et al. 2006) and merging of planning levels produces serious obstacles for the introduction of SEA that requires clear definition of the types of strategic initiatives for the successful establishment of screening system.

- **Mixed definitions and unclear legal status of strategic initiatives**

There are no regulations in Belarus, which would define the terms for various strategic initiatives clearly. On practice a serious mixture and coincidence of definitions is observed as it is discussed above in the *Subchapter 4.1* . Some initiatives which do exist on practice (like policy) have no definition in the law, other initiatives which are defined can have much broader meaning and nature then it is described. Same names (like concept) are used for the definition of strategic initiatives (certain stage) and legal initiatives, namely drafts of laws. The legal force of various types of strategic documents is also not clarified. The hierarchy of documents in strategic planning in also mixed like in the case of interrelation between policy, forecast, plan and programme (*Subchapter 4.1*). These knotty issues result in one big problem for application of SEA – it is not

clear what to consider as a strategic initiative which is a potential field for SEA application.

- **No definition of a 'proposal' of strategic document - unclear time for screening application.**

  The absence of concrete definition for strategic initiative is supplemented by a parallel problem of the uncertainty of stages in strategic planning. It is not clear what can be considered as a strategic proposal. In other words, it is obscure when an *'idea'* of a development of strategic document generated by a state officials can be considered as defined enough to have a serious perspective to become an *activity* with all its environmental impacts. At present time, practiced stages of strategic planning do not foresee a stage for the application of environmental assessment. Though, there is such a term as 'concept' of strategic document, it is not elaborated enough and not pointed out in the national legislature as a 'field of application' for environmental assessment.

- **No procedure of EA screening of strategic initiatives is defined**

  Vague definitions , *poorly developed procedure* and complete *absence of guidelines* on the EA of strategic documents as well as *lack of sanctions for non-application* of SER on strategic level leads to the practical freedom in the question of necessity of EA application and thus to the lack of such practice. Deficiency of practice and absence of procedure for EA of strategic initiatives aggregates the introduction of SEA screening system.

- **Possible concurrence of SER and SEA**

  Although on practice SER in Belarus is not applied to the initiatives on strategic level, according to the law it is nevertheless required for such initiatives. Introduction of SEA with its own screening system might lead to the concurrence of two procedures for environmental assessment and duplication of screening.

2) <u>Human capacity</u>

Human capacity denotes "skills and expertise of individuals and their motivation" (Jurkeviciute and Dusik 2004). In the considered case, this includes 'thinking paradigm' and attitudes of decision-makers and other actors involved, personnel (professional) potential and so on.

As for possible complications for the building of human capacities for SEA screening in Belarus, it is important to point out the following barriers:

- **Risk of failure due to unavailability to accept**

  Establishment of SEA screening system requires professional knowledge and skills. At present time, as it is stated in the Strategy for Capacity Development for Strategic Environmental Assessment in the Republic of Belarus for the Period to 2012, there is a certain deficit of professionals who are able to take the responsibilities for the implementation of SEA screening system and execution of its provisions. "Belarusian professionals have limited knowledge of SEA methodologies and practical experience in applying SEA techniques". They use

mainly “the “engineering” approach, based on technical norms and thresholds and used for assessment at the project level” and this is not effective at the strategic level” (UNDP 2006)

- **Risk of rejection due to unwillingness to accept**

  Absence of practice EA of strategic documents, lack of knowledge in this field and other challenges mentioned above require introduction of serious innovations to support the implementation of SEA screening system. These innovations will require preparation of new specialists, retraining, reeducation, re-distribution of authority and changes in the thinking patterns of officials prevalent over the years. These tendencies may provoke the rejection of the implementation of the screening system from the side of individuals involved in the process.

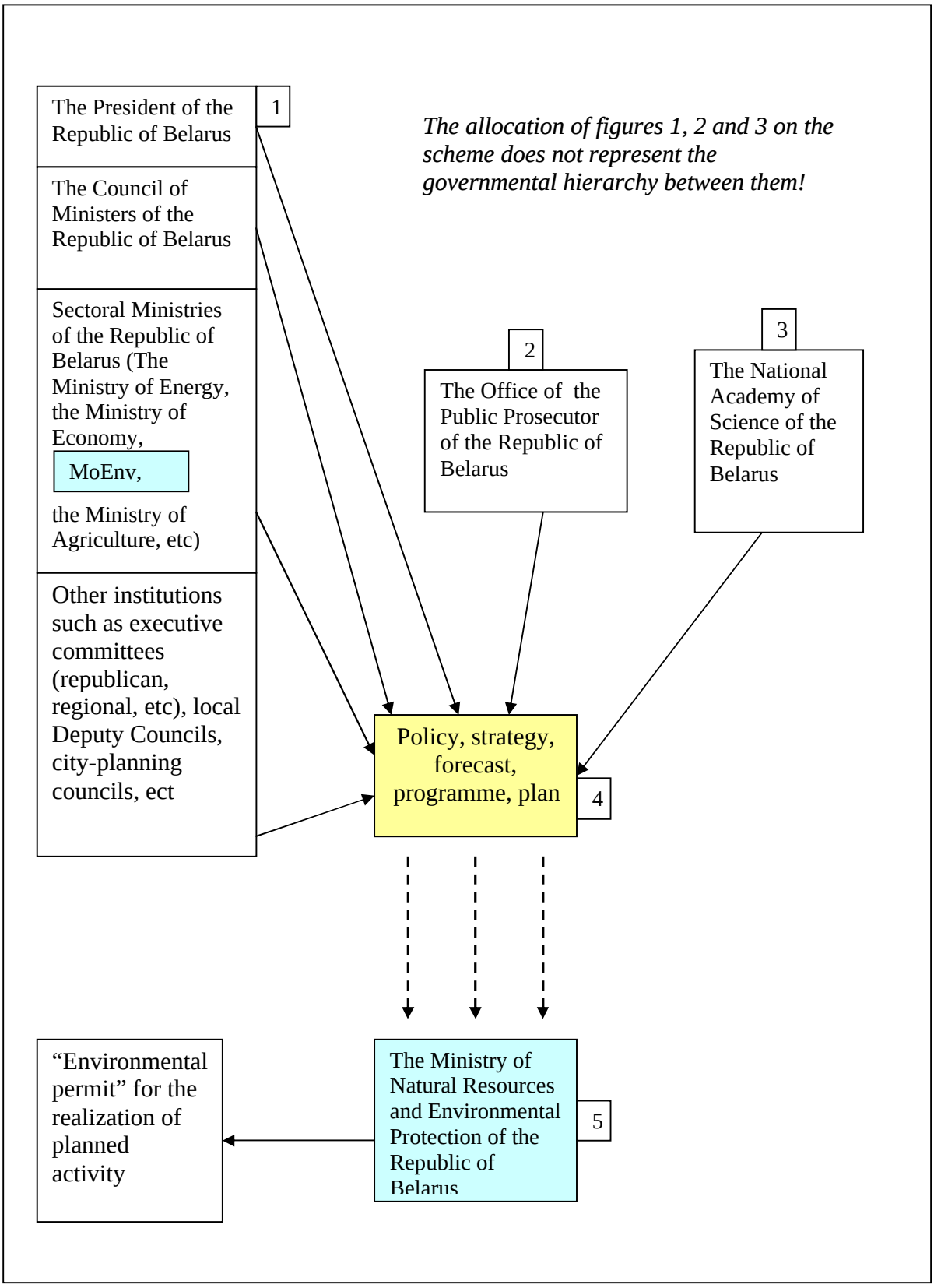
3) <u>Institutional capacity</u>

Institutional capacity implies the “ability of an organization to operate effectively within a given system” (Jurkeviciute and Dusik 2004). In application to EA in Belarus, institutional capacity includes the distribution of authorities and responsibilities among the state bodies, efficiency of their operation, institutional hierarchy, etc

Development of institutional capacity for the operation of SEA screening in the Republic of Belarus is one of the most challenging issues in this area. Mainly, this is explained by the necessity of too radical changes in the distribution of competence among governmental bodies.

At present time the Ministry of Natural Resources and Environmental Protection is the main state actor in the field of environmental assessment. Basically, as it was discussed in the *Subchapter 4.1*, the conduction of SER (including SER of strategic documents) lies entirely in the competence of the Ministry. It currently implied that exactly MoEnv will be the authority responsibly for supervision of SEA including screening (UNDP 2006; REC 2006; MoEnv 2008). To illustrate the further discussion of challenges resulting from such allocation of competence, the simplified system of interrelation between main actors in EA (currently - SER) of strategic documents (analyzed also in *Subchapter 4.1*) is graphically presented below on the **Scheme 11**.

Scheme 11. *Interrelation between main actors in EA of strategic documents in Belarus*



Figures 1, 2 and 3 on the *Scheme 11* represent the developers (or requesters of the development) of strategic documents and, according to the Law on SER, initiators of environmental assessment, figure 4 represents the documents developed and figure 5 is the state body undertaking environmental review of these documents.

There is a number of challenges for the implementation of SEA screening into the system reflected on the *Scheme 11*:

- **Inefficient distribution of authorities**

  As it is shown on the *Scheme 11* the MoEnv is obliged to conduct a review of strategic documents developed by the state bodies often standing in the governmental hierarchy higher than the named Ministry, not accountable to it and having bigger authoritative capacities. And if in the case of figure 1 the institutions listed in it are at least located in the same state planning structure as MoEnv, then in the case of figures 2 and 3 the state institutions indicated there represent completely different, separated governmental structures. At it is mentioned in the UNDP report (2006) "the existing Belarusian decision-making system and formulation of strategic initiatives does not provide an adequate policy framework for the effective application of SEA. Programme developers are obliged to seek approval of their proposed programmes with the MoEnv on issues that are within the competence of the Ministry". Such state of affairs leads to the following complications:

  - MoEnv is not informed about all strategic initiatives being developed

- MoEnv does not have access to information needed for the assessment of strategic initiatives
- Since the responsibility to initiate the assessment lies on the developer (or state requester) of strategic initiative, MoEnv can not compel the institutions located higher in the governmental hierarchy to comply with requirements of mandatory environmental assessment of strategic documents developed. In other words, the Ministry of Natural Resources is simply lacking authority and control mechanisms to force other institutions to submit strategic initiatives, which they elaborate and approve, for the environmental review.
- Theoretically, MoEnv has to make resolution (via application of the "environmental permitting procedure" to strategic initiatives) on the possibility of realization of strategic decision lying far beyond MoEnv's competence.

- **Legal invalidity of a "self-assessment"**

  The Ministry of Natural Resources and Environmental Protection is not only a main responsible state organization in the field of EA but also a developer of a number of strategic initiatives (for example, environmental programmes) which need to be screened and assessed. Thus, the Ministry is making an assessment of its own strategic documents. The validity of such assessment is under question.

4.4 SPECIFIC CONTEXT-BASED SEA SCREENING CRITERIA FOR BELARUS

The challenges pointed out above are addressed by the development of specific context-based criteria for SEA screening and presented in the *Table 4* . These requirements supplement the GSSC clauses contextualized further. The clauses of specific context-based criteria have index starting from Latin capital letter M in order not to mix them with the provisions of GSSC.

It should be mentioned that specific context-based screening criteria present just challenge-based requirements for building EA screening system in Belarus but not the complete set of instructions which will solve all the possible problems in this field and keep 'model' rules for SEA screening (for example, rules compiled in GSSC).

Table 4 *Specific context-based SEA screening criteria*

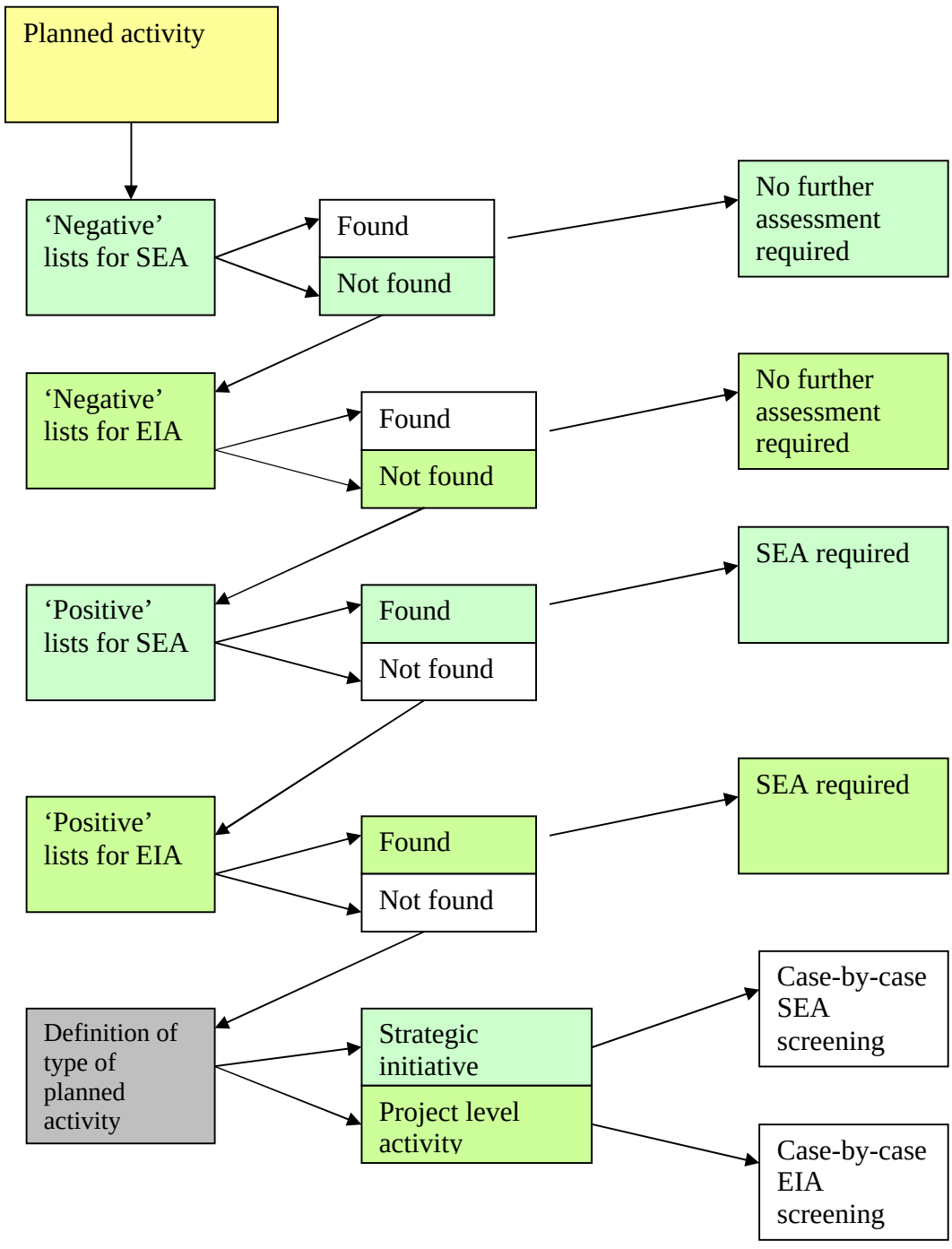
Challenge to be addressed	**Screening criterion**
1) Merging or project and strategic level actives into one category and clustering of EA requirements (strategic and project level EAs are not separated).	**M. Pre-screening, common for SEA and EIA and based on the 'lists' approach, should define the type of activity under examination as well as the need for and type of further environmental assessment.** *Pre-screening should be based on four types of 'lists*: - 'negative' lists of strategic level activities, which do not have significant impact on the environment and do not require SEA - 'negative' lists of project-level activities, which do not have significant impact on the environment and do not require EIA - lists of strategic activities which have significant impact on the environmental and require SEA - lists of project-level activities which have significant impact on the environmental and
2) Mixed definitions and unclear legal status of strategic initiatives	

	require EIA Thus, by scanning these lists it the *need for assessment and type of assessment to be applied is defined.* If a considered planned activity can not be found in any of this lists or there are certain doubts *pre-screening must define the type of activity (project or strategic-level) and thus appoint the type of further screening to be applied (EIA or SEA).* Further screening should take a form of case-by-case examination. This procedure is graphically presented on the *Scheme 12* created for better visualization
3) No definition of a 'proposal' of strategic document - unclear time for screening application	**N1. Clear definition to a 'proposal' of a strategic document should be made.** **N2. Screening must be applied on the stage of the development of a strategic document when** - **the document is defined enough to assess its possible environmental impacts.** - **in the case of the positive decision about the need for EA application, the assessment still can be conducted simultaneously with the elaboration of the document and necessary modifications of the document required to address the results of SEA still can be made** For example, the stage of screening can be placed between the following stages of the document development: - Development of a concept of a strategic document - Development of draft (project) of strategic document by a group of developers However, in-depth context study needs to be made by the developers of SEA system in Belarus before they make a decision about the time of screening.

4) No procedure of EA screening of strategic initiatives is defined	**O. The procedure of pre-screening, SEA screening and EIA screening should be developed and clearly defined in practical guides and legal documents.**
5) Possible concurrence of SER and SEA.	**P. Strategic initiatives should be excluded from the list of activities - subjects to mandatory SER. All strategic level initiatives should be a subject for SEA screening** **or** **P1. Improved SER procedure should be applied to strategic-level initiatives and undertake functions of pre-screening which will defined the type of assessment to be applied (common SER and SEA screening)** (see clause **M**).
6) Risk of failure due to unavailability to accept	**Criterion O is applicable for this challenge.** *Development of very detailed instructions for screening can help to improve the situation.* However, main efforts should be made by the developers of national SEA system by means of education and training of future professionals.
7) Risk of rejection due to unwillingness to accept	**Q. Screening procedure should not contain requirements, which require radical measures for its implementation.** **R. The need for screening should be defined in the national law and foresee sanctions for avoidance.** However, the problem of non-acceptance of screening is a general problem of the acceptance of the whole SEA system and can be hardly solved only by means of the elaboration of proper screening criteria. The building of 'human capacity' for the introduction of SEA system is a responsibility of multiple stakeholders.

8) Inefficient distribution of authorities	**S. Distribution of rights and responsibilities (allocation of authority) among state structures in SEA screening should take into account the subordination between the institutions-developers of strategic initiatives and their place in the governing hierarchy.** However, this dilemma can not be solved in the framework of this research and requires complete separate study. The responsibility of the creating conditions to support the implementation of this criterion rests on the developers of SEA system in Belarus.
9) Legal invalidity of a "self-assessment"	**T. The institution controlling the quality of screening application should not be at the same time a developer of screened activities.**

Scheme 12. *Proposed pre-screening procedure in Belarus (criterion M)*



4.5 JOINT CONTEXTUALIZED SEA SCREENING CRITERIA FOR BELARUS

The results of the whole research made in the framework of this thesis are presented in the form of **joint contextualized sea screening criteria for the Republic of Belarus** (JCSSC). JCSSC for Belarus are developed by means of combination of two blocks of requirements for SEA screening:

1) *GSSC clauses* (elaborated in *Chapter 3*) *modified were necessary with the regard to Belarusian context.*
2) *Context-specific screening criteria* (elaborated in *Chapter 4, Section 4.4*).

Thus, JCSSC take into account 'model' SEA screening requirements, best screening practices, provisions of international documents and at the same time addresses the challenges of the context of implementation without the necessity of radical changes in this context.

Joint contextualized SEA screening criteria are presented in the *Table 5* (lefts column). Each provision of JCSSC is accompanied by the clarifications of its origins (right column). Namely, left column contains those clauses of GSSC and context-specific screening criteria (differentiated by alphabetic index) which served as a basis for the new JCSSC. The table also contains explanatory comments for selected cases.

Table 5. *Joint contextualized sea screening criteria for the Republic of Belarus*

CSSC for Belarus	**GSSC and context-specific screening criteria addressed**
Main principles: Screening system in Belarus should be based on the principles of **efficiency, effectiveness and legitimacy** (completeness and conformity with the SEA Protocol and National Law) Screening should take into account the significance of environmental impacts and characteristics of planned activities	Adopted from the main principles of GSSC.
A(c) All strategic initiatives which can have significant environmental impacts should undergo SEA and strategic initiatives which are unlikely to have environmental impacts or likely to have very insignificant impacts should not undergo SEA.	**A.** All strategic initiatives which can have significant environmental impacts should undergo SEA and strategic initiatives which are unlikely to have environmental impacts or likely to have very insignificant impacts should not undergo SEA
Comments: In this case clause A of GSSC is accepted without modifications. The definition and measure for the significance of environmental impacts should be defined and assigned in national legal documents.	
B(c) The procedure of pre-screening, SEA screening and EIA screening should be well developed, defined in the national law and supplemented by the detailed guidelines and instructions for application.	**C4.** The screening application time and procedure should be clearly defined in the law **O.** The procedure of pre-screening, SEA screening and EIA screening should be developed and clearly defined in practical guides and legal documents. **D.** Screening criteria must have univocal interpretation **R.** The need for screening should be defined in the national law and foresee sanctions for avoidance.
C(c) The screening provisions (including the requirement of mandatory screening of all strategic initiatives) defined in the national law should foresee sanctions for	**R.** The need for screening should be defined in the national law and foresee sanctions for avoidance.

avoidance	**G.** Acceptance of screening system
D(c) SEA screening system should be adapted to the Belarusian state planning system, should not require radical modification of the latter and take into account its specificity.	**L.** Screening should not require radical modification of the system strategic planning in a country **Q.** Screening procedure should not contain requirements which require radical measures for its implementation. **G.** Acceptance of screening system
E(c) A definition should be given to such notion as "strategic document", to its main types, modifications, characteristics, stages of development and it distinction from the project-level documents.	**N1.** Clear definition to a 'proposal' of a strategic document should be made. **B.** The 'field of application' should be clearly defined **B1.** The 'field of application' should include also modifications of strategic initiatives defined as object for screening
F(c) Screening should be applied uniformly – same screening procedure should be applied to the same types of strategic initiatives	**F.** Screening should be applied uniformly
G(c) Screening should be applied systematically to all initiatives developed on the strategic level regardless of place of the institution-initiator in the governing hierarchy. Experience should be used for the improvement of screening system	**J.** Screening should be performed on systematic basis. Experience should be used for the improvement of screening system
Comments: In the context of Belarus accumulation and considering of good and bad experience is very important since the country is a 'beginner' in the field of SEA application	
H(c) Screening must be transparent and traceable	**I.** Screening must be transparent and traceable
Comments: Publicity of information is especially important issue for Belarus.	

Information on screening (including the results) should be available from the responsible institution (currently the Ministry of Natural Resources) for all interested authorities and open to public. Screening results should be entered in accessible databases.	
I(c) Screening system must be flexible: **I(c)1** Screening should be applicable to individual 'unusual' cases – case-by-case examination should be supported **I(c)2** Screening system should allow updates: **I(c)2.1** React on changes in the 'field of application' – pre-screening lists must be regularly up-dated **I(c)2.2** Adapt to changes in the SEA system – react on the changes in the distribution of functions in the state EA structure consisting of SER, SEA and OVOS	**E.** Screening system must be flexible: **E1.** Screening should be applicable to individual 'unusual' cases **E2**. Screening system should allow updates: **E2.1.** React on changes in the 'field of application' **E2.2.** Adapt to changes in the SEA system
Comments: Since SEA screening in Belarus is a new field which just starts its development. Updates and changes in the 'field of application', SEA system and planning system are expected – planning system and SEA system will mutually shape each other. Due to the absence of practice in SEA screening most of the cases screened will be considered as 'unusual'. Changes in the 'field of application' can result from the development of new types of strategic documents.	
J(c) Pre-screening, common for SEA and EIA and based on the 'lists' approach, should define the type of activity under examination as well as the need for and type of further environmental assessment. Further SEA screening should be based on the case-by-case examination	**K1.** Screening should be based on the combination of 'case-by-case' and 'lists' approaches **K2.** Screening should consist of pre-screening and screening stages **M.** Pre-screening, common for SEA and EIA and based on the 'lists' approach, should define the type of activity under examination as well as the need for and type of further environmental assessment. **B.** The 'field of application' should be clearly defined

	C2. Screening must be characterized by usability and require reasonable efforts **C3.** Balance between cost and precision should be kept **C3.1.** "Negative lists" should be used **C3.2.** Quick decisions should be possible for "routine" cases (pre-screening, simple check list)
Comments: **Detailed explanations to the clause are given in the *Section 4.4* and on the *Scheme 12*!** Criterion will facilitate flexibility (**I(c)**) and uniform application (**F(c)**) of the screening and adaptation to Belarusian system of strategic planning (**D(c)**)	
K(c) Screening must be applied on the stage of the development of a strategic document when - the document is defined enough to assess its possible environmental impacts. - in the case of the positive decision about the need for EA application, the assessment still can be conducted simultaneously with the elaboration of the document and necessary modifications of the document required to address the results of SEA still can be made	**C1.** Screening must be applied opportunely **N2.** (same as **K(c)**)
L(c) Distribution of rights and responsibilities (allocation of authority) among state structures in SEA screening should take into account the subordination between the institutions-developers of strategic initiatives and their place in the governing hierarchy.	**S.** Distribution of rights and responsibilities (allocation of authority) among state structures in SEA screening should take into account the subordination between the institutions-developers of strategic initiatives and their place in the governing hierarchy. **H.** Screening should be independent from whose who carry it out
Comments: this clause was provided with detailed explanation in *Section 4.4.*	
M(c) Screening procedure should be fulfilled by a group of external	**H.** Screening should be independent from whose who carry it out

independent experts, who are not members of the state institution-developer of strategic initiative.	**T.** The institution controlling the quality of screening application should not be at the same time a developer of activities screened.
N(c) Place of SEA screening in the system of SER and OVOS should be clarified: **N(c)1** Strategic initiatives should be excluded from the list of activities - subjects to mandatory SER. All strategic level initiatives should be a subject for SEA screening or **N(c)2** Improved SER procedure should be applied to strategic-level initiatives and undertake functions of pre-screening which will defined the type of assessment to be applied (common SER and SEA screening)	Based on the identical (**to N(c)**) clause of context-specific screening criteria (**P and P1**)

In order to illustrate how JCSSC address contextual challenges discussed in *Chapter 4, Section 4.4* a correlation matrix is developed and presented in the *Table 6.*

Table 6. *Matrix of correspondence of CSSC and challenges in the context of application*

		Clause of CSSC for RB														
		A(c)	B(c)	C(c)	D(c)	E(c)	F(c)	G(c)			H(c)	I(c)	J(c)	K(c)	L(c)	M(c)	N(c)	
Challenge addressed	1					■	■						■					■
	2					■	■						■					■
	3					■	■						■					■
	4	■	■				■	■			■	■	■	■		■		■
	5					■												■
	6		■	■	■						■							
	7		■	■	■						■		■					
	8		■	■	■		■	■							■	■		
	9		■	■	■		■	■							■	■		

Thus, as it is indicated on the matrix all pointed out challenges are addressed by the provisions of JCSSC.

5 CONCLUSIONS

5.1 MAIN FINDINGS

Screening is the first step of strategic environmental assessment. Applied to plans, programmes, policies and other strategic initiatives, it defines the need for further conduction of SEA. There are different types of screening approaches and various models of screening procedures.

When developing a SEA screening system a country is always facing the same question – how to adopt general SEA screening provisions found in the international documents to a particular specific national context and make them work in it? This question is poorly studied in the literature and hardly elaborated in the implementation guides for international agreements in the field of SEA. Any country just starting establishment of SEA system needs a guiding line, a set of criteria for the development of effective and efficient screening system and these criteria need to be contextualized in order to address the specific challenges of the implementation of SEA screening on the national level.

This scheme is especially relevant for those countries in transition, for example, Newly Independent States, which are still running EA system (with more or less substantial modifications) inherited from the Soviet Union.

The Republic of Belarus is a typical example of a post soviet transition country, which is now considering its way towards the development of SEA system.

At present time Belarus is building the capacity for the implementation of the SEA Protocol, one of two main international documents regulating strategic environmental assessment (the second one is the SEA Directive). The Protocol requires alongside with other arrangements elaboration of SEA screening system in the country. However, the need for the development of SEA system in Belarus is grounded not only on the perspective of the Protocol ratification. The need for incorporation of SEA into strategic planning is recognized by national authorities and defined in national legal documents, for example in the National Strategy for Sustainable Development.

This study aims to develop generic SEA screening criteria (GSSC), which are effective, efficient, applicable in a particular national context and at the same based on screening provisions found in the international documents and extracted from successful screening practices as well as on the features of 'good' screening recognized in the literature. Further, this study aims to research the challenges for implementation of SEA screening system in a transition country via contextualization of GSSC thorough EA and planning systems of the Republic of Belarus.

To address these objectives the present study went through the following steps (discussed in details in *Chapter 1, Section 1.5* and illustrated with *Scheme 1*):

1. Review of concepts (found in various sources) of 'good' SEA screening
2. Analysis of screening regulations defined in the SEA Protocol
3. Review of international practices in SEA screening

4. Development of generic SEA screening criteria (GSSC), which compile a set of 'model' requirements for effective and efficient screening system.
5. Research of context for the implementation of SEA screening in Belarus. The context analysis included studies of current EA system and system of national strategic planning.
6. Pointing out main hypothetical challenges for the implementation of SEA screening in Belarus
7. Development of joint contextualized SEA screening criteria (JCSSC), which included all requirements collected in GSSC and address national specificity

Apart from the overall result of this research contained in the JCSSC, a number of interim findings and conclusions was gathered throughout the research process.

GENERIC SEA SCREENING CRITERIA

The literature review indicated very few studies devoted to the SEA screening problem, though many authors underline the need for the development of requirements for SEA screening (Sommer 2002; Lee and George 2000; Therivel 2004).

Literature review, analysis of screening practices of different countries and examination of international documents showed that no generic SEA screening criteria accumulating requirements to effective and efficient screening system can be found. Thus, the necessity of the development of such criteria is defined.

Basically, the study of SEA theory allowed to formulate three main known types of screening approaches:

- Pre-screening, based on the list of strategic initiatives, which have significant environmental impacts and require mandatory application of SEA. (further –'lists' approach)
- Case-by-case examination, which defines the need for each planned activity by means of individual careful consideration
- Combination of two approaches

Though screening approaches differ, they all are based on the definition of environmental significance of a planned activity.

Examination of screening provisions of the SEA Protocol (*Chapter 2, Section 2.4* .) resulted in the following findings:

- Screening procedure described in the SEA Protocol is based on combination of 'lists' approach and case-by-case examination
- The decision upon the necessity of SEA application is based on the assessment of the significance of environmental effects of planned activities
- Screening procedure under the SEA Protocol consists, first, of the definition of the 'field of application' and then the 'need for application' of SEA

Analysis of the SEA Protocol revealed that screening regulations, defined in this document, are very basic and have a number of uncertainties. Thus, member-countries can and should supplement the requirements of the Protocol with context-based screening criteria.

Countries, those screening practices were reviewed (*Chapter 2, Section 2.5 and Table 2*) included Newly Independent States and other 14 states, namely Canada, Czech Republic, New Zeeland, Denmark, Ireland, Finland, Netherlands, Hong Kong, United Kingdom, Norway, Italy, Portugal, Spain and Hungary. Separation of NIS into an individual category is made on purpose, due to the similarity of their context to the Belarusian one. Examination of screening practices discovered that SEA screening is most commonly based on 'lists' approach or on combination of 'lists' with case-by-case examination.

Review of screening practice and theory resulted, alongside with other findings, into the formulation of the **main dilemma of screening** (*Chapter 3* and *Scheme 8*). Screening dilemma is concluded in the necessity to *find a proper balance between the level of precession of the screening and its costs.* Practically it means that the 'cheaper approach', which is 'lists' approach, provides low level of precision (if only extremely detailed lists are not produced) and flexibility, but allows to reduce costs. 'Case-by-case' examination supports high level of precision and flexibility, but requires high costs, consumes time and other resource. On the basis of this finding, a definition, crucial for the development of screening criteria, is formulated. Effective and efficient system of SEA screening is such a system, which can achieve its objectives with the highest possible level of precision and lowest possible costs and minimal bureaucracy.

Ideas about the requirements for a good screening system, extracted from various literally sources, main findings resulting from the analysis of the SEA Protocol and outcomes of the examination of screening practices of various countries were re-considered and compiled together in **generic SEA screening criteria** (*Chapter 3 and Table 3*).

GSSC contain a set of ‘model’ requirements which are not touched by contextualization for a particular country. GSSC are a sample set of benchmarks for an effective and efficient SEA screening system. Thus, **GSSC include** such criteria as

- Completeness and conformity with the SEA Protocol
- Mandatory application of SEA for all strategic initiatives which are likely to have significant environmental effects
- Rejection of application for those which are unlikely to have significant environmental effects
- Clear definition of the ‘field of application’ for screening
- Balance between cost and precision
- Opportune time for screening
- Acceptance of screening system
- Screening procedure characterized by usability and requiring reasonable efforts
- Univocal interpretation of screening criteria
- Flexibility
- Uniform application
- Independence of screening from those who carry it out, etc.

Apart from that, according to GSSC screening procedure should consist of pre-screening based on ‘lists’ approach and ‘screening’ based on case-by-case examination. Screening should not require radical modification in the state system of strategic planning.

CHALLENGES FOR SEA SCREENING IN BELARUS

Analysis of Belarusian context for the implementation of SEA screening (*Chapter 4, Sections 4.1 and 4.2)* included study of current system of environmental assessment in the country (with focus on screening) and examination of state system of strategic planning.

It was discovered that current EA system consisting of SER (State Environmental Review, also called "environmental permitting procedure") and OVOS (Assessment of Environmental Impacts) is not applied to the initiatives of strategic level. Moreover, screening as such does not exist in this system. Namely, SER is applied to all developed projects collected in very comprehensive lists. Strategic initiatives remain beyond the scope of this assessment.

Belarus is running central system of strategic planning, which is poorly described in national legal documents. No such term as 'strategic initiative' if defined in the law.

Thus, examination of the context for SEA application in Belarus allowed to find out a number of challenges to be addressed (*Chapter 4, Section 4.3*). These challenges include

- Merging or project and strategic level actives into one category
- Clustering of EA requirements
- Mixed definitions and unclear legal status of strategic initiatives
- Absence of definition of a 'proposal' of strategic document resulting in unclear time for screening application

- Possible concurrence of SER and SEA
- Inefficient distribution of authorities among state actors in EA system and others.

Further, specific context-based SEA screening criteria were developed (*Chapter 4, Section 4.4* and *Table 4*) to address each of these challenges. Further, these criteria were incorporated into joint contextualized SEA screening criteria for Belarus.

JOINT CONTEXTUALIZED SEA SCREENING CRITERIA – OVERALL FINDING OF THE RESEARCH

JCSSC represent, in fact, the collection of findings of the whole research (*Chapter 4, Section 4.5* and *Table 5*). JCSSC are developed particularly for the implementation in the Republic of Belarus. JCSSC include

- GSSC clauses modified were necessary with the regard to Belarusian context and
- Context-specific screening criteria

Thus, joint contextualized SEA screening criteria keep the requirements for SEA screening defined in international documents, utilize successful screening experience of various countries and at the same time address specific challenges of the Belarusian context. JCSSC give useful 'tips' for elimination of barriers for SEA screening in the country.

Thus, by means of the development of JSCCS this research came to a conclusion that the requirements for the effective and efficient must, among the others, include the following basic points[14]:

[14] The list of JSCCS presented here is not complete. The complete list can be found in *Chapter 4, Section4.5 and Table 5.*

- Screening system in Belarus should be based on the principles of efficiency, effectiveness and legitimacy
- All strategic initiatives which can have significant environmental impacts should undergo SEA and strategic initiatives which are unlikely to have environmental impacts or likely to have very insignificant impacts should not undergo SEA.
- A definition should be given to such notion as “strategic document”
- Screening should be applied uniformly
- Screening must be transparent and traceable
- Screening system must be flexible - applicable to individual ‘unusual’ cases, allow updates, react on changes in the ‘field of application’, etc
- Screening procedure should be fulfilled by a group of external independent experts
- Place of SEA screening in the system of SER and OVOS should be clarified
- Screening must be applied on the stage of the development of a strategic document
- Pre-screening, common for SEA and EIA and based on the ‘lists’ approach, should define the type of activity under examination as well as the need for and type of further environmental assessment. Further SEA screening should be based on the case-by-case examination and others

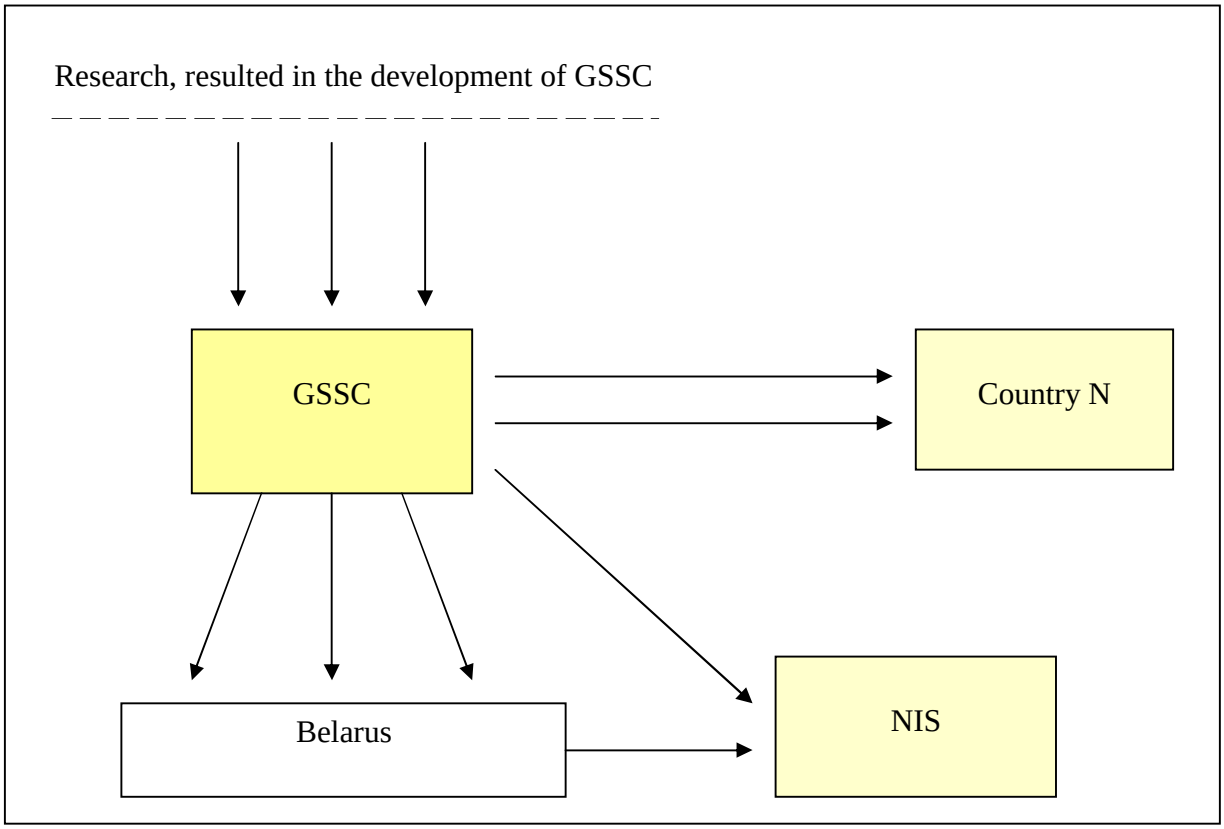
5.2 MULTIPLE POSSIBILITIES OF APPLICATION OF 'GSSC-CONTEXTUALIZATION METHOD'

Elaboration of the GSSC is not only an intermediate step forming the base for the elaboration of SEA screening criteria for Belarus. GSSC contain a set of requirement to an effective and efficient screening system not tied to any particular country. GSSC accumulate provisions of the SEA protocol, mandatory for any member-country, and generalized principles of screening, which turned out to be successful in any context.

Thus, GSSC can be considered as an independent research outcome with multiple application (*Scheme 13*). Namely, the 'method of GSSC contextualization' developed in this research can be applied in any country introducing SEA. Moreover, GSSC can be also utilized as a set of useful guiding points in the process of modification and perfection of already established and functioning screening system.

Further, the particular contextualization method applied for Belarus in this thesis and the results of this contextualization in the form of joint contextualized SEA screening criteria can be used in the countries with similar SER/OVOS background, namely selected Newly Independent States.

Scheme 12. *Possibility of the application of GSSC-contextualization method beyond the scope of this research*



5.3 NEED FOR FURTHER RESEARCH

JCSSC include main principles which are aimed to help to establish effective, efficient and legitimate SEA screening system in Belarus. However, these general clauses, though guide the development process, still need to be specified further. Such specification lies outside the scope of this research but sets a number of tasks for SEA-developers in Belarus.

Criterion **L(c)** of JCSSC is one of the most difficult for implementation and requires additional efforts.

> **Criterion L(c):** Distribution of rights and responsibilities (allocation of authority) among state structures in SEA screening should take into account the subordination between the institutions-developers of strategic initiatives and their place in the governing hierarchy.

It is recommended for SEA-developers to conduct additional research and assess the potential of various state bodies which could take the responsibility for application of SEA. Such institution should, first of all, have enough 'power' to force developers (requesters of development) to submit their strategic initiatives for SEA and secondly, have enough 'knowledge' for conduction of SEA. Enforcement measures need to be elaborated.

The second JCSSC provision especially recommended for further elaboration, is criterion **N(c)**

> **Criterion N(c):** Place of SEA screening in the system of SER and OVOS should be clarified

Measures for the implementation of this criterion can not be developed at once in the beginning of the process of SEA introduction in Belarus. SER/OVOS and SEA systems will gradually shape each other. Certain reforms are expected and it is hard to predict the governmental course in this field. Yet, the problem of possible double-screening of documents in the framework of both SEA and SER/OVOS systems needs to be solved as soon as possible. To address this dilemma further context-based research is recommended.

5.4 INTROSPECTION FROM THE AUTHOR

This thesis, apart from the contribution foreseen by its aims and objectives, made a significant contribution to the personal professional development of me as a researcher. Due to this study I obtained valuable experience in developmental research and learned how to:

- Approach scientific problems; establish hypothesis, aims and objective for a research
- Develop research methodology
- Conduct interviews
- Apply interpretive policy analysis and other research methods
- Struggle with laziness and deconcentration!

Apart from that, I gained priceless knowledge in my research field and reconsidered some issues, which I, as I thought, was more that sure about.

Not being to ambitious, but optimistic, I believe that apart from academic, my study can also make some practical contribution and once presented to Belarusian decision-makers would help to form a theoretical basis for the actual development of SEA system in the country. I also hope that developed generic SEA screening criteria can be used in other studies, which in their turn, could contribute at least a bit, at least partially to the development of SEA systems in other countries.

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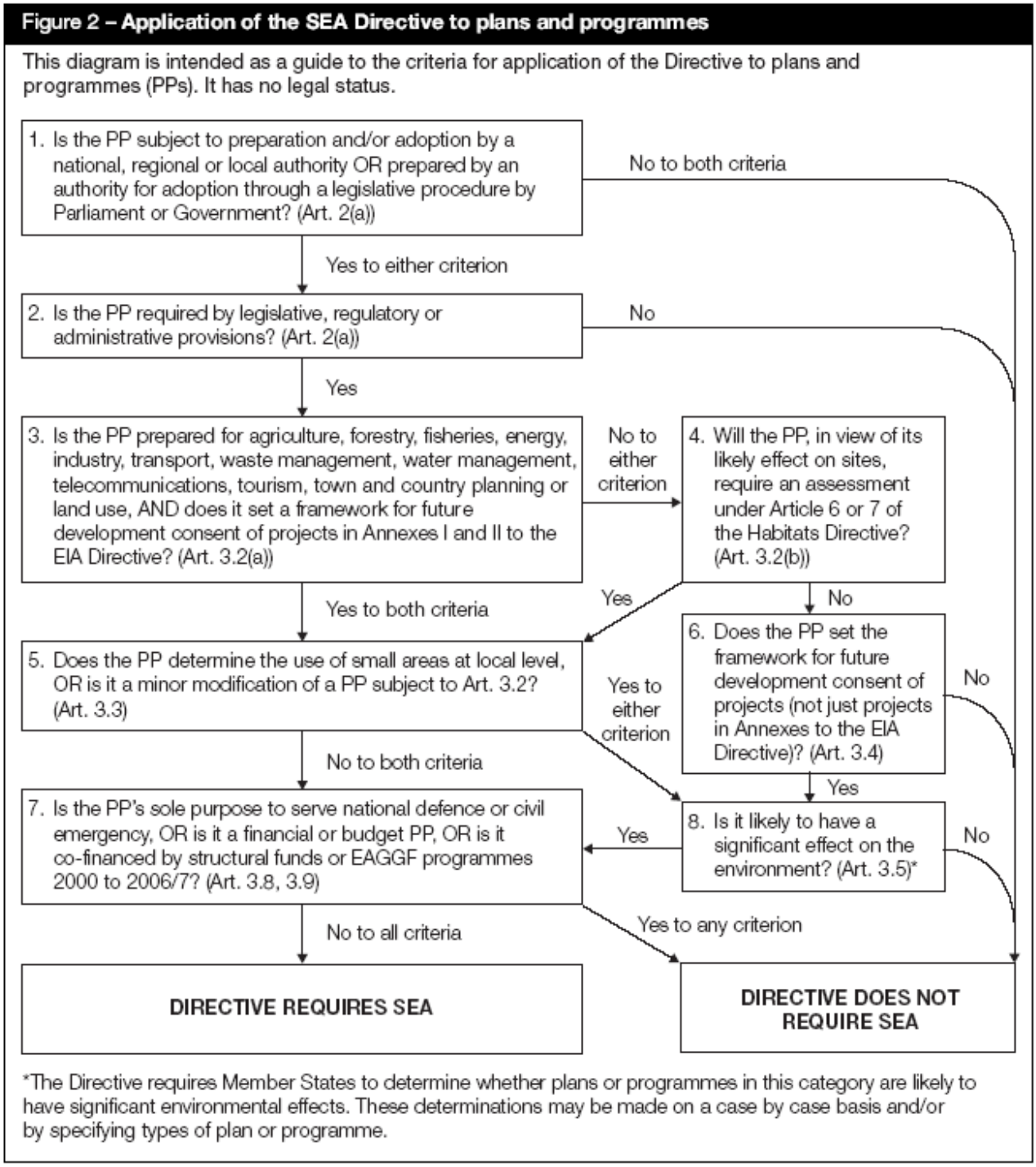
ANNEX I – SEA SCREENING UNDER THE SEA DIRECTIVE



Source: A Practical Guide to the Strategic Environmental Assessment Directive 2005