# CURRENT TRENDS OF PUBLIC MANAGEMENT

Collective monograph

### Ministry of Education and Science of Ukraine Chernihiv National University of Technology

## CURRENT TRENDS OF PUBLIC MANAGEMENT

Collective monograph

Edited by Shkarlet Serhiy, Doctor of Economic Science, Professor, Rector of Chernihiv National University of Technology UDC 35.075

BBC 67

Recommended for publication by the Academic Council of the Chernihiv National University of Technology (protocol № 4 from 27/03/2017)

#### Reviewers

Varcholová Tatiana, Dr.h.c. Prof., University of Central Europe Skalica, Slovakia

Gechbaia Badri, Doctor of Economic Science, Associated Professor, Batumi Shota Rustaveli State University, Georgia

**Bobrovska Olena**, Doctor of Science in Public Administration, Professor, Dnipropetrovsk Regional Institute of Public Administration of National Academy of Public Administration Under the President of Ukraine, Ukraine

#### Academic series: Public management and administration

Initiated by the Institute of Public Administration and Management of Chernihiv National University of Technology in 2015. Issue 7.

**Current trends of public management**: collective monograph / [collection of scientific papers; edited by Shkarlet Serhiy, Doctor of Economic Science, Professor, Rector of Chernihiv National University of Technology]. – Published by Academic Society of Michal Baludansky in cooperation with UK Technical University of Košice, Slovakia, 2017 – 194p. – (educational-scientific series: "Public management and administration"; issue 7). Printed by UK Technical University of Košice, Slovakia. Printing 300.

#### COLLECTIVE OF AUTHORS:

COLLECTIVE OF NOTHORS.	
Prof. Tkalenko Nataliya, Doctor of Economic Sciences	§1.1
Prof. Marhasova Viktoriya, Doctor of Economic Sciences	§2.2
Prof. Vyhovska Valentina, Doctor of Economic Sciences	§4.3
Prof. Oliychenko Igor, Doctor of Science in Public Administration	§3.1
Prof. Takaladze Larisa, Doctor of Economic Sciences	§4.1
Prof. Goletiani Ketevan, Doctor of Technical Sciences	§1.2
Rudenko Olga, Doctor of Science in Public Administration	§1.1
Seliverstova Ludmila, Doctor of Economic Sciences	§2.2
Zakharin Sergii, Doctor of Economic Sciences	§4.2
Derii Zhanna, Doctor of Economic Sciences	§1.3
Ditkovska Maryna, PhD (Science in Public Administration)	§3.2
Jakubek Peter, PhD (Management)	§1.3
Badida Miroslav, PhD (Technical Sciences)	§3.2
Mykhailovska Olena, PhD (Economic Sciences)	§1.2
Filipova Nataliia, PhD (Economic Sciences)	§1.2
Li Inin, PhD	§4.2
Dubovická Lenka, PhD (Economic Sciences)	§3.1
Van Vencian, PhD(Economic Sciences)	§4.2
Zosymenko Tatiiana, PhD (Economic Sciences)	§1.3
Sakun Oleksandra, PhD (Economic Sciences)	§2.2
Klymenko Tetyana, PhD (Economic Sciences)	§2.2
Kosach Iryna, PhD (Economic Sciences)	§4.1
Perminova Vlada, PhD (Pedagogical Sciences)	§4.3
Itchenko Dmitrii, PhD (Technical Sciences)	§2.1
Dorosh Mariia, PhD (Technical Sciences)	§2.1

The book covers the theoretical and methodological foundations and practical implementation processes of public administration in the context of the modern paradigm of social development.

The main attention is given to research theoretical basis of public administration, the genesis of categorical apparatus, especially the development of public administration today. The possibility of using the experience of the leading countries in applying modern approaches to public administration with consideration of the specific aspects of the regional and national economy is explored. The attention is focused on applied aspects of the communication process in public administration, introduction of e-governance and the application of information technology, economic security and implementation of the principles of e-democracy.

The monograph is intended for scientists, teachers of higher education, employees of state authorities and local self-government, post-graduate students, students of economic universities.

© Chernihiv National University of Technology, 2017

CHAPTER 1. THEORETICAL ASPECTS OF PUBLIC MANAGEMENT IN	
CONTEXT OF MODERN PARADIGM OF SOCIETY DEVELOPMENT	
1.1 POSTMODERN PARADIGM OF PUBLIC MANAGEMENT IN SCIENTIFIC	
AND THEORETICAL DISCOURSE	8
1.2 ORIGIN AND THEORETICAL BASIS OF NEW PUBLIC MANAGEMENT	28
1.3 THE ECONOMIC ESSENCE AND EVOLUTION OF THE CATEGORY OF	
HUMAN POTENTIAL IN CONTEXT OF NEW PUBLIC MANAGEMENT	37

#### CHAPTER 2. MODERN APPROACHES TO THE TRANSFORMATION OF PUBLIC MANAGEMENT PROCESSES: STATE AND REGIONAL LEVEL

2.1 PROJECT APPROACH TO IMPLEMENTATION OF ENTERPRISES' ANTI-	
CRISIS STRATEGY WITHIN THE REGIONS' GOVERMENT POLICY	55
2.2 GOVERNMENT CONTROL OF LOCAL INNOVATIVE CENTERS	69
2.3 GOVERNMENT REGULATION OF INSURANCE SERVICE MARKET OF	
UKRAINE	92

#### CHAPTER 3. MODERN PRACTICES OF COMMUNICATIVE PROCESS IN PUBLIC MANAGEMENT: NEW CHALLENGES AND OPPORTUNITIES

3.1 E-GOVERNANCE AND QUALITY OF INFORMATION IN THE STATE	
AUTHORITY SYSTEM	112
3.2 THE DEVELOPMENT OF THE INFORMATION SYSTEMS IN PUBLIC	
ADMINISTRATION AS COMPONENTS OF E-GOVERNANCE	133

#### CHAPTER 4. INTERNATIONAL EXPERIENCE AND COOPERATION AS A VECTOR REFERENCE POINT FOR THE DEVELOPMENT OF THE PUBLIC MANAGEMENT SYSTEM

4.1 THE FOREIGN EXPERIENCE OF PUBLIC-PRIVATE PARTNERSHIP IN	
AGRICULTURE	155
4.2 STATE SUPPORT OF ECONOMIC COOPERATION OF CHINA AND	
UKRAINE ENTERPRISES	166
4.3 SECURITY CONTROL FEATURES OF THE INSURANCE MARKET OF THE	
EUROPEAN UNION COUNTRIES	179



#### Dear Readers

The evolution of modern society is conditioned by the complex influence of a combination of the most important tendencies and factors that determine the progressive development of its economic, political, social and spiritual spheres. This impact is adequately projected in the strategic priorities of reforming the public administration system.

The general theoretical conception of the dynamics of social change is reflected by the modern paradigm of innovative development of society. In this paradigm, the influence of these trends and factors is also considered as their adequate design in the theory and practice of social and public administration, the key principles of which provide the update of the system of public administration through a comprehensive mechanism of innovations by the implementation of government-management reforms.

The current state of socio-economic conditions of the institutions' activities, in particular of public authorities, is characterized by dynamic changes in the external environment. The global financial and economic crisis, the instability of the political and legal field, the change in the vectors of development, make it necessary to search for approaches and create a universal management style in the system of public administration.

When writing the monograph, the authors' team chose a combination of synergetic concepts with a set of approaches, among which today the most important are: globalization-related, informational, innovative, social, Europeanisation-related, situational and systemic.

The aspiration of Ukrainian society to progressive transformations on the basis of European values predetermines the need for a large-scale, timely,

adequate and rapid update of the effectiveness of the public administration system within the targeted implementation of public management reforms. This reinforces the need for more in-depth refinement of theoretical and methodological principles, taking into account the evolution of the theory and practice of social and public administration, as well as the strategic objectives of the implementation of the new public administration policy of Ukraine.

The development of the theory and practice of public administration is based on a set of theories of social management, the main of which are the concepts of administrative management, human relations, the empirical concept of management, a new concept of management science, etc. The principles of these concepts have influenced the development of the concepts of public administration, among which the modern ones are: the concept of "new state (public) management" and varieties of the "Governance". In recent decades, their principles have been the basis of administrative reforms of different countries in the world. In the modern world, the implementation of the principles of the European Strategy for Innovation and Good Democracy is being established as a further development of the concept of "Governance". The reform of the national system of public administration in recent years is in line with the strategy. The new public administration policy focuses on the decentralization and reformation of public administration, regional policy and local government.

Institutional transformations, which occur alongside with changes in the socio-political life of modern Ukraine, significantly increase the responsibility of public administration for the consequences of social transformations.

The monograph, presented at your discretion, consists of four chapters that are logically interrelated and provide a comprehensive view of the possibilities and mechanisms for ensuring the formation of a modern system of public administration.

The monograph covers a wide range of issues on a stated topic that are considered from different points of view, under many angles, taking into

account all aspects of the phenomenon of globalization, as well as the theory and practice of the public administration system at the state and regional levels. The publication is intended for civil servants, researchers, post-graduate students, doctoral students, heads of state institutions and enterprises, public organizations and associations, a wide range of specialists from various fields, as well as readers interested in issues related to public administration and local selfgovernment.

The development of the theoretical and methodological foundations of the research of modern mechanisms of public administration is carried out in science in direct connection with theoretical issues of the study of the conceptual apparatus of public administration, evolutionary processes, which is reflected in chapter 1 of the proposed monograph.

In chapter 2 of the monograph, attention is paid to the implementation of modern approaches to public administration, namely: the relationship between the Project Management methodology and the concept of strategic management as effective tools of anti-crisis policy of regional development; state regulation of processes of innovation development and the market of insurance services in the context of reforming the modern system of public administration.

Practical realization of the main modern approaches and tools for implementing public administration policy in the conditions of formation of the information society, taking into account the dominant concepts of e-democracy, is studied by the authors in chapter 3 of the monograph.

Chapter 4 summarizes the global experience of using best world practices in ensuring the process of developing and implementing a public administration policy based on effective mechanisms aimed at the full utilization of the intellectual potential of society, the creation of a consensus and partnership system, an open dialogue between public administration, the political elite and the society.

The proposed collective work is aimed at solving scientific, practical and methodological issues in the field of public administration at the present stage of evolution of the society and is intended for scientists, teachers of higher education, employees of state authorities and local self-government, postgraduate students, students of economic higher educational establishment.

The material of the monograph can also be used in the practice of public administration to determine the direction of further improvement of transformational processes. Familiarity with the peculiarities of effective modern practices in this field will enable professionals to gain knowledge that will lay the foundations for the further development of their professional competencies.

Sincerely, Prof. Serhiy Shkarlet

#### CHAPTER 1 THEORETICAL ASPECTS OF PUBLIC MANAGEMENT IN CONTEXT OF MODERN PARADIGM OF SOCIETY DEVELOPMENT

#### 1.1 Postmodern paradigm of state administration in scientific and theoretical discourse

The study of social processes, solving problems of managing social development within the public administration are carried out on the basis of gradual departure from the classical paradigm and replacing it with a new, formed within the "postmodern state administration", causing the need to develop relevant theories, concepts and approaches that would be based on processes of social interaction between the system of government and society, affecting the efficiency of state-specific management decisions. So governance acquires qualitatively new features interdisciplinary scientific field. The study is based on a sound scientific developments in the theory and methodology of state administration of such foreign authors as J.C Garcia Zamor and R. Hathor, N. Henry, J. Green, F. Dobbin, D. Kittl, I. Craib, F. Lane, L. Lynn, N. Lovrich, H. Miller and C. Fox, J. Moore and H. White, W. Ostrom, K. Papadulis, R. Ramani, R. Stillman, J. Frederickson, C. Fox, K. Fuchs, A. Harrington, B. Marshall and H.-P. Muller, P. Sztompka.

In public administration classical paradigm can be distinguished, which forms the organizational theory, political theory and some research related to the problems of the structure and functions of the civil service at all levels of administration. The classical paradigm is characterized with mainly being focused on theoretical and methodological principles of the theory of bureaucracy as epistemological paradigm of most academic researchers in the field of public administration, backed by progressive ideas of classical management thought 19<sup>th</sup> - early 20<sup>th</sup> century, based on the administrative dichotomy of W. Wilson and the principles of federalism (in its American version), the ideas of members of management theory and management D. Waldo, M. Weber, A. Maslow, M. Meskon, G. Simon, D. Smitburg, F. Taylor,

A. Thompson, to pay attention in the context of state administration to J. Shafritz, B. and B. Fry and J. Raashelders, M. Milyakovich and J.Gordon, C. Ott and J. Shafritz, J. Cerami.

In second half of the twentieth century classical paradigm of state administration expanded through the use of political analysis (D. Kettl and J. Fesler, W. Dunn, D. Rosenblum, R. Kravchuk, R. Klerkin, J. Davis), motivational theory (P. Denhardt, J. Denhardt M. Aristidzhet), decisions (E. Downs, D. Stone, S. Maine), the theory of regulation of conflicts and general principles of the conflictology (L. Nigro, E. Kello), human resources administration (Hayes, R. Kirmi, J. Kohhborn, S. Reeves), analysis of the effectiveness of management activities (L. Lynn). This situation actually created the conditions for convergence of state administration and economics, political science, organizational theory, although its specificity as a form of social control is saved and remains valid with relevant issues. The issues of methodological developments in the field of public administration are relevant too, applying the methodology of political science, organizational theory and theory of organizational structures, organizational behavior and leadership, human resource management, administrative law, economic analysis, etc., which are gradually adapting to the challenges and problems aspect of the theory to the actual practice of public administration.

The majority of researches within the classical paradigm of state administration slightly use to theories of social development and theories of public management development. Most of the works on problems of management of social development disclose issues of method through the study of complex social phenomena, which includes social stability, as the method used within the public administration methodology, due to the subject of the investigation. In last case we are talking about the need to expand the scope of the subject of the public administration in theory. This makes it possible to rethink the methodology of public administration and going beyond its classical paradigm, forming the basis for theoretical analysis of social phenomena and processes.

However, understanding the classical paradigm, as indicated by L. Lynn [1] contains certain doubts about the possibilities of a paradigm of state administration, where mindset, focused on traditional bureaucratic paradigm for management is a basis of such doubts. For L. Lynn it is clear that traditional bureaucratic paradigm is not only outdated but "caricature" as well, such that distorts traditional thinking which contains elements of legal awareness, values, reasonably managerialism. But if management thinking does not apply to components of theoretical reflection of processes of social development, there are conditions for the development of revisionism and reductionism of state administration to preserve the traditions that are contained in the pure practice orienting of this sphere of social control, forming its unprincipled and antiposition. Consequently, the analytical discourse of state intellectual administration loses integrity, consistency and comprehensiveness that will play within the basic concepts of social development management principle of irresponsibility which makes explicit the real practice.

In this case, it becomes obvious to shift the major emphasis in public administration from the classic paradigm that is predominantly pragmatic, enforced with common manager position as for introducing the elements of scientific understanding of complex social phenomena and processes within the paradigm of non-classical science, which are emphasized by F. Lane, V. Ostrom, R. Stillman, J. Frederickson. The latter can be considered as a prerequisite for the state administration of social development which subject area is not limited to a focus on the development and improvement of practical ways to implement the scientific paradigm and filled with basic theoretical research that helps to overcome a certain gap and the imbalance of theory and practice of public administration as an interdisciplinary branch of science. In this context, one of the key elements of the new paradigm is the ability to state administrating, in order to regulate the changes taking place in society, meaning

to provide conditions not only for flexible response, but also to create the basis for their scientific prediction and the development of effective mechanisms for managing social change to overcome their side effects.

The scientific opinion of the modern period refers exactly to this. But the theoretical basis for the analysis of social processes is not as much social and philosophical or managerial context but traditional approaches for western public opinion on sociology. P. Sztompka [2] explores the sociology of social change, pointing at the reflection of modern theory dynamics in enhancing changes. He notes that at the theoretical level scientific understanding of the dynamics of social processes took place in several stages: evolutionary, cyclical, dialectical and post-oriented on development. Within these stages P. Sztompka is trying to reconsider the concept of the social process, development, progress, social time, historical tradition, modernity, postmodernism and globalization, which makes it possible to expand research position in terms of theoretical study of problems of social development and management. This position leads to the need for a new approach in which state management would not be limited to purely public bodies and public authorities as a specific subject of science, and would bring the theory of government so-called postmodern paradigm. J.C. Garcia Zamora and R. Hator, N. Henry, J.Green, N. Lovrikh, D. Kittl focused on the need to expand the theoretical context of state administrating.

Postmodern paradigm of state administration which recently has been actively developing, is claiming to get the status of academic, trying to overcome pragmatism and normative of classical paradigm even despite criticism from its supporters. The basis of criticism of postmodern paradigm is contained of false statements about a theoretical point of convergence of administrative practice and theory of bureaucracy within social studies. As pointed K. Papadulis [3], representatives of postmodern paradigm actually mixed the principles of rationalism and relativism trying to develop the idea of Social Sciences reduced to social engineering. According to K. Papadulis, postmodern paradigm can not get rid of relativism and stay within classical

positivism on basis of which management develops. So a critical position on attempts of postmodern concepts of state administration to marginalize the public administration and social sciences in general, leaving no room to empirical component of social cognition is important from the point of view of classical paradigm supporters. But even these observations do not solve the problem which is common for government - no single comprehensive theory, which replaces the theory of bureaucracy by M. Weber, which has almost no connection with current political and organizational theories.

In this context, even the approach of the public administration theory to the theory of social systems in order to address management of social development by identifying ways to ensure the sustainability and stability of the system is not always successful because as noted by K. Fuchs [4], the theory of social systems is a subject for reductive individualism and dual functionalism within which adequate human integration is impossible. In order to avoid dualism, reductionism and mechanistic determinism, K. Fuchs offers a dialectical concept of social systems based on the concept of self-organization. Dialectical theory of social self organizing K. Fuchs tries to supplement with the ideas of structuration theory of A. Giddens, claiming that the structure is medium and the resulting action (theorem of dual structure), meaning both allow and restrict social action.

Based on this idea K. Fuchs claims that social systems are "re-creative" (such that recreate themselves), that is, self-organizing. Re-creativeness is based on the creative activity of mankind and social structures become valid because of productive practices and attitude of human factors. In this context the problem of humanity evolution if considered by K. Fuchs as neo-functional aspect: he recognizes the existence of important structural element in social systems that promotes the historical development of society based on the dialectic of chance and necessity and the principles of order due to fluctuations in the conditions of instability and bifurcation.

Charles Fox [5] critics the orthodoxy approach to the state administration, where procedural practice of pseudo-democratic form of implementation of control mechanisms by social development aimed at providing specific priorities (mainly related to the interests of individual political groups) trying to keep the status-quo which was formed and is convenient for stable relations between the authorities and society dominates. Disagreeing with supporters of this condition of state administration, C. Fox opposes their postmodernist theory of government, believing it is more democratic and ethical, based on the ideas of J. Derrida, M. Foucault, adapting them to the new project of government in terms of decentralization policy. In fact, Charles Fox tries to make a revision of the theory of political governance and identify opportunities for its democratization, developing the concept of democratic governance.

Exploring the postmodern paradigm of governance, H. Miller and C. Fox [6] indicate that the postmodern public policy introduces new ways to study the problems of public administration. Consequently, there are new approaches in public administration and public policy developing, which are dominated by technical-instrumental methods. These approaches are aimed at providing objective analysis of complex problems of social development and public management within a gradual approach to managerialism. Basically, state administration as a form of social scientific knowledge in this situation should cooperate with civil society, reducing the distance between citizens and government, creating a theoretical research within the context of the conditions for the adaptation of historic approaches to the analysis of processes of social development.

Considering this, H. Miller [7] finds it appropriate to develop new concepts of state administration which should combine principles of epistemology, evolutionary theory, and theory of discourse within a single postmodern paradigm of public administration. In his view, this approach is not contrary to the traditional pragmatic orientation of the government as envisages as grounds political pluralism and social interaction between the system of state

administration and society affecting the efficiency of certain state-management decisions.

The most positive aspect in position of H. Miller is the possibility and the need for innovative synthesis of disparate theories (in traditional opposition to the classical and postmodern paradigms), which brings state administration to new horizons in the development of public policy in the sphere of social development creating conditions to conceptualize problems of sustainable development of social systems and social stability.

Basically, there was the rise of social development issues within the public administration in the second half of the twentieth century, which requires changing the traditional theoretical and methodological approaches and even paradigms of understanding social processes. Paradigm shift in government from classical to postmodern paradigm creates conditions for further systematization and analysis of social phenomena based on a multidisciplinary approach considering the specificity of state administration as an independent scientific field. Considering the systemics of modern society crisis and the need for regulation of the system of governance and an important priority in the theory of state administration there is a stability problem of social development - a theoretical understanding of social stability in the new paradigm of state administration.

Basically, the nowadays situation in the theory of state administration is characterized by a gradual transition from classical to modern and postmodern paradigms. The main impetus for changing of paradigm context revealed the urgency to develop adequate modern conditions of social development concepts that define a renewed vision of social management. In the last case, one of the priorities of theoretical reflection in the theory of government is expanding its interdisciplinary content and comprehension when scientists actively seek and apply scientific achievements in such fields as political science, economics, various social theories, etc. Plus, important step in developing a new paradigm of state administration is methodical search carried out in different areas of theoretical research management community development issues related to the analysis of social systems and their properties, and first of all, stability (stamina) and the instability of social systems.

The issue of modern social theory and the theory of origin of the social world explores J. Craib [8], trying to understand theoretically the social structure within its action. The consistency of these two theoretical concepts is formed within the structural functionalism of T. Parsons, neo-functionalism and conflict theory, supplemented by theories of rational choice and symbolic interactionism. Remarkable attention is paid to the application of structuralism version of marxism, and postmodern theory, combined with critical theory of J. Habermas. Considering this theoretical and methodological saturation, specification of the subject of social theory complemented with practical content, allows to navigate the changes in contemporary society, considering their impact on theoretical thought and effects research approach.

However, sometimes provision of interdisciplinary charges the state administration with synthetical character, because clear demarcation between social theory and the theory of government in some cases is difficult to establish. For example, A. Harrington, B. Marshall and H.P. Mueller [9] point to the synthetic nature of social theory, where the tangible elements of political theory and interdisciplinary methodology typical for public administration are noticeable.

Considering this, R. Ramani [10] refers to the analysis of formation of social communities and the gradual development of a society, regulated with mechanisms, which are made at the level of state and political institutions. He emphasizes the need to respect the correspondence between the existing mechanisms of government, social development trends and the latest affecting the change in governance.

On the other hand, the actuality of use of an interdisciplinary approach is demonstrated by J. Wolf and G. Vemsli [11], who refer to the analysis of the crisis of the American political system disclosed in government crises associated with the absence of higher levels of political and government consensus on goals conserning social development. The main idea developed by J. Wolf and G. Vemsli becomes the central position of public administration in the management of social development, hence the need to compensate for inadequate growth of political leaders. In this context, the researchers propose to review the relationship between public administration and civil service and civil society that they serve trying to determine the possibility of the system of government structural balance between change and stability of society to maintain a sustainable democracy.

J. Herrera [12], who examines the relationship between technology and international politics, arguing that international politics is shaped by the technologies which are crucial, considering the pace of technological change in society significantly extends the traditional paradigm of governance in their trials. J. Herrera, based on the theory of international relations and historical sociology, suggests a complex theory of historical relationship of technology and international politics, getting new results in the analysis of political economy and security relevant to the governance of social development demonstrating the possibilities of interdisciplinary approach. In this context they analyze system of changes made within the modern paradigms (primarily nonmaterialistic understanding of the structure), which approximate the theoretical understanding of technology in public policy, government, international policy in the sphere of social appears relevant in order to reach a new management practices complex social systems.

As part of a general public perspective, M. Daley and H. Silver [13] analyze the concepts of social exclusion and social capital indicating origin because of confusion or overlap of one another concept of social exclusion. Thus, usually social isolation is reduced to the problem of capital which reduces the possibility of public policy because the basis of a theoretical tradition does not understand processes which include specific social phenomenon. In this

respect, the researchers put in a context social relationships and social networks, criticizing the policy of "decisions".

A little different point of view is given by J. Chopra [14], who believes that governance mainly manages changes in the pursuit of "socially defined" social values trying to preserve the appearance of openness and transparency. In theoretical analysis of this question J. Chopra refers to the analysis of the process of forming public policy of government and civil society in terms of improving the management component of the interdependence of the two systems on the role and responsibilities of political leadership and heads of public authorities.

In this aspect, the limited application of the classical paradigm of government to the current problems associated with the dynamic changes in the social environment and the need for adequate responses to changes in the social system, which requires more theoretical grounding in the theory of government than traditional pragmatism, should be mentioned. Thus, examining issues of institutional changes in the theory of J. Burke and D. Helven [15] concludes synthetic organization that determines its functional structure that can be recombined whereby the latter depends on the cultural and institutional resources of the organization. In fact, it is the theory of creative syncretism which researchers consider as the basis of changes based on the phenomenological approach which in part explain the emergence and consolidation of institutional norms and values in society. Although the concept of experience as a basis for understanding social phenomena within institutionalism brings ideas of J. Burke and D. Helvena to some extent to pragmatism of J. Dewey, especially in terms of understanding social norms.

In this context F. Dobbin [16] criticized organizational theory pointing out that the analysis of indifference within it leaves a convincing classical approach of P. Bourdieu. But in practice it appears that this approach and organizational theory actually applied fragmentally, unlike modern "paradigmatic" as key projects in modern management.

From the point of view of theoretical understanding in government sustainability of social systems and their development institutional theory on which it is possible to highlight specific levels of emergence and transformation of stability and thus determine the specific mechanisms of state-administrative regulation of social development in order to ensure social stability is important. It is advisable to refer to the opinion of J. Mor and H. Whyte [17] who explore social institutions as a set of mechanisms that combine three types of social distributions: microsystems social interaction with meso- and macrolevels of the organization. The basis of this approach is the principles of empirical research and binary correlation that linked researchers with new strategies for strategic studies of mechanisms based on a number of analytical methods. This allows John. H. Mora to promote and justify two main hypotheses: institutional stability (in terms of the ability to respond to changes flexibly) directly correlates with the general level of structural relationships that combine the levels of their significance representative bodies and implementing bodies; institutional changes, characterized by a large number of connections, defined as stable in terms of sustainability to comparison of significant number of specific forms of a particular institutional space.

The use of symbolic interactionism towards classical studies of industrial bureaucracy by Goldner to expand the boundaries of institutionalism has been performed by T. Hallett and M. Ventreska [18]. According to the researchers, modern institutionalism and symbolism are not antagonists, but rather may be combined with the framework of "human institutions approach" that focuses on local and outside the local involvement and relationships. T. Hallett and M. Ventresky note that this approach is constructive in terms of understanding that institutions are the foundation of social interaction, as their basis, the principles of social interactions ("interaction building"), and an understanding that institutions are created and developed under the influence of social interaction.

In the last case, the researches move their focus from the theoretical courses to the methodological problems of the analysis of public processes. Such

situation is the model for the day-to-day state management which actively participates in the field of methodology. Although there is a problem here that needs special attention because it clearly emphasized the direction concerning analysis of social systems and society as a whole, so its parts slowly get a status of separate subject of state administrating theory. It also should be mentioned that in the everyday state management there is no general concept which could combine theory and methodology in terms of concrete paradigms without sorting them according to the level of interdisciplinary performance and specific scientific use.

This assertion is based on the development of D. Hitchins [19] who states that there is no single scientific theory combining a set of different ideas of scientists and summarize their methodological research and development hence the preservation of dogma in science. As an alternative approach in this case, D. Hitchins believes is systematics and analysis of socio-technical systems which development is due to the emergence of the concept of chaos and disaster that set limitations on the use of a specific methodology for analyzing complex phenomena and processes giving the dynamic changes in the present conditions of social life as a limiting condition for scientific knowledge. D. Hitchins offers unified hypothesis that uses entropic configuration or unified concept since the systems are either real, those that can be perceived or understood through reduction to chaos from which they are conceptualized and defined. Unified hypotheses are trying to understand complex systems through the study of all types: physical, chemical, biological, social, environmental, etc., not trying to criticize question of loyalty or disloyalty management.

D. Hitchins offers seven principles of building a unified system of hypotheses which include reaction system, system connectability, adaptation of unity in diversity, limited variety, preferential model and the cyclic sequence. The combination of these principles is a life cycle plan which is not a single system but a set of open systems that interact and can be displayed. These principles point to the causes of association in the set, the emergence of chaotic,

catastrophic, or priority linear interactions of each, based on their stability causes the decline or collapse and regrouping their main components. As D. Hitchins offers to represent these principles in the form of taper / transition state, the unified system of hypotheses is actually the sum of principles, but not a specific basis for describing the stages of the life cycle of the system and causes the transition from one to another. Important in this context is the possibility of a unified system of hypotheses to analyze a wide range of economic, political, social, organizational and technical systems.

Sometimes researchers emphasize the connection not only of the state management of other social sciences in research methodology, but also in the theory. S. Polinedou [20] establishes fairly clear parallels between the development of social theoretical thought and governance that leads to the development and distribution in classical and modernist theory of governance, the approximation of classical theories of government to behavioral and socialpsychological theories. An important development in the theory of government according to S. Polinedu is comparative methodological principle that develops in the work process.

Another leading theoretical principles of research the processes of management of public development is the theory of hegemony, especially quantitative theory of hegemonic stability which is the basis of scientific forecasting changes in domestic and foreign policies on economic development taking into account the component of national security which is getting actual in the conditions of integration and globalization. Considering the current changes in the international economic situation and the need to adjust hegemonic stability theory, V. Conavay [21] points to the urgency of its modification in terms of upgrading the methodological basis of economic research at all levels of governance and society.

Question of levels of society and its state within the methodology of public administration actively takes interdisciplinary but still the leading idea of adapting this methodology to the specific governance as specific management practices social development remains. Attempts of T. Jacob [22] to pay attention to the appropriateness of the search for new models of development perspective of the relationship of government and civil society actors in governance should be noted as well. In this context, T. Jacob resorted to the analysis of modern society at all stages of its development defining features of state management in each of them.

Quantitative methods are used not only in government but also in public policy, management of non-profit organizations, etc., have become the subject of research of J. Miller [23]. The scientist emphasizes the importance of theory of building and testing, increasing the role of information and analytical research tools in solving complex problems of social development and public management effectively the potential of visualization, planning and implementation of research projects and opportunities analysis, using quantitative methods in public administration, not only in theory but also in practice. A bit further on this approach is D. McNabb [24] who by exploring the issues of quantitative and qualitative methods in public administration drew attention to the need to supplement its methodology of critical approaches. K. Young [25] agrees with J. Miller pointing to the need for a unified position of scientific research system in public administration through the use of a wide range of methods and techniques manufactured by other sciences in the implementation of research projects. It is about the possibility of using systematic research methods in solving traditional problems of public administration at the theoretical and practical levels.

In terms of theoretical studies of problems of state social development, and also considering the idea of D. Hitchins for the public administration development of paradigm theory of social stability it is important while it allows to specify a system of hypotheses on issues of social development within a unified theory of social stability in the new paradigm of state management along with the conceptualization of design research which includes linear, logical organization responsible for systematizing goals and objectives of the study are

grouped accordingly. According theoretical and methodological research, the structures are equal, explaining the logic of research and existing problems of scientific results; forming the concept of research and analysis methodology to apply a particular subject and object; providing scientific foresight and problem solving application of scientific results (modeling, quantitative methods, etc.), the analytical level of understanding of the phenomenon or process that specifies the theoretical achievements; reveal the implications and prospects for future research. In terms of theory and methodology of government accentuation it is important to note that most research procedures related to the analysis of complex processes and phenomena are super theoretical that characterize not only the specifics of the research object or subject but also makes specific set of methods and their practical application in the development of state-making.

The need and feasibility of combining governance and methodology of social science also is indicated by J. Chopra, analyzing the problems of research in public administration. R. Arora [26] considers modern public administration as a product of certain evolutionary processes linking its growth with the development of information and communication technologies. He stresses the need to replenish the theoretical and methodological arsenal of government research new approaches that develop within an interdisciplinary and comparative analysis that enables developing and offers new dimensions of understanding and solving the problems of public administration. R. Arora sees this opportunity in the development of innovation in state administration.

Taking into account the complexity of the phenomenon of society as a system and the need for verification of theoretical positions, many researchers also refer to the methodology of "exact" sciences trying to adapt to the needs of government methods of mathematical and statistical modeling, dynamic analysis etc., in different ways and at different levels of state social system. Thus, J. Woldendorp and H. Kiman [27] as an empirical analysis introduce dynamic analysis of the interaction between the different categories of subjects and institutions besides interactive behavior of relevant subjects within an institutional context turns to be a heuristic basis, that allows to use dynamic institutional analysis for research policy in the socioeconomic sphere (as well as in other areas of policy) promoting formation of methodological compromise in interdisciplinary studies including comparative, overcoming the gap between quantitative and qualitative approaches.

Exploring the issues of theoretical and methodological understanding of global human development, R. Smith states that multileveled statistical models of studying the effect of civilization zones and instrumental impacts on human potential are important in terms of identifying the potential of human development at the country and society [28]. R. Smith bases on the UN Human Development indicators – indexes, synthesizing a level of education, life expectancy and income. He also adds to this group the indexes of the level of development, political democracy, corruption, internal conflicts, evaluating them as instrumental factors. It is important that political freedom is combined with civil responsibility which is the basis of regional differences in the assessment of human development and understanding of the fact that civilization zone and corruption immediately become destabilizing factors as leading to shifts in the structure of societies and deformation of social and political life.

In work of N. Bellomo, M. Vertolli and M. Delital [29], the applicability of the modeling of complex social systems of mathematical modeling in mathematical kinetic theory within active parts, leaving the possibility of analyzing mathematical models in social terms is proved. The researchers conclude that the possibility of such a model to describe the process of influence social policy and allocation of public goods to the general trends of society is evident even in spite of the existing theoretical and methodological pluralism in modern science.

Due to methodological context formed in the present government, it can be argued that the priority of theoretical reflection science is the study and analysis of society as a whole system with its inherent characteristics. In fact, one could argue that the study of social processes, problem solving, managing

social development within the public administration should be based on a gradual departure from the traditional paradigm and its replacement with new one formed within postmodern public administration causing the need to develop relevant theories, concepts and approaches. Getting rid of the bureaucratic orientation of the traditional paradigm which reflects insufficient social problems, a new paradigm of governance should apply to the field of contemporary social postmodern studies within which the public administration acquires qualitatively new features interdisciplinary scientific field.

Theoretical studies in modern state administration are aimed at establishing the nature of various phenomena of society as actual givens, as specific phenomenon that is seen mainly as a specific subject of governance, the analysis which applies an interdisciplinary methodology. Thus one of the main problems in the plane conceptualize management community development within the modern paradigm of governance is the issue of stability and sustainability of social systems which at the level of total scientific abstraction can beconsidered as social stability, which provides theoretical understanding of this complex phenomenon from the perspective of equality of stability / instability development.

On the basis of the research the classic, modern and postmodern paradigm of public administration is highlighted. Fundamentals of the classical paradigm were laid in the writings of W. Wilson (1880), which distinguishes public administration as an independent direction of administrative science. Later (till 1950) based on the concept of scientific management theories of bureaucracy, organization, motivation, introduced the theory of government, the classic paradigm focused on solving the problems of society, politics and relationship management, administration and civil service federalism. Besides the main components are the classic paradigm of political theory and the theory of organizational behavior and leadership, economic analysis, policy analysis, decision-making and more. As a result, the classical paradigm is characterized as practice oriented, rational, single dimension unit and linearity. The second half of 1950s there is the concept of "new state management" (J. Frederickson) which became the basis for the formation of modern paradigm that focuses on the analysis of social conditions of society, problems of uncertainty and instability of the environment, developed the principle of separation of powers and on the development of administrative ethics. Modern governance paradigm is introduced with theories of social development management, conflict of rational choice, international relations, hegemonic theory, critical theory of J. Habermas, structurational theory of A. Giddens. Also principles of historical sociology, managerism and institutionalism are important. Modern paradigm is characterized by technologism, nonlinearity, and indeterminism.

Active application of "post non-classical" science principles (nonlinearity, indeterminism) in public administration in late 1970s initiated the formation of postmodern paradigm that draws attention to the development of complex systems and management problems intersystem interactions, questions of geopolitics and global governance. The basis of this paradigm was the concept of "postmodern public administration" (Charles Fox, H. Miller) within which is a synthesis of principles synergy of values, universalism, social engineering, structural functionalism of T. Parsons, neofunctionalism, praxeology, organizational cybernetics, neoliberalism. Postmodern paradigm of government represented evolutionary, postindustrial theories, theories of discourse, symbolic interactionism, chaos and catastrophes, creative syncretism quantity theory of hegemonic stability and so on. The main characteristics of this paradigm are: relativism, instrumentalism, innovation, interdisciplinarity.

Directions for further researches should be the study of historiography of the science of public administration in Ukraine, developing a single concept, combining theory and methodology within a particular paradigm, not separating them by the level of interdisciplinary representation and certain scientific peculiarity of use.

#### Reference

- [1] Lynn L. The Myth of the Bureaucratic Paradigm: What Traditional Public Administration Really Stood For / Laurence E. Lynn, Jr. // Administration & Society. – 1985. – Vol. 17.
   – №. 3. – P. 307-330.
- [2] Sztompka P. The sociology of social change / Piotr Sztompka. San Francisco, CA: Wiley-Blackwell, 1994. – 368 p.
- [3] Papadoulis K. Postmodern public administration theory: from Simon to the present and back again? / Konstantinos J. Papadoulis // Public Policy and Administration. – 2005. – V. 20. – № 1. – P.52-56.
- [4] Fuchs Ch. Structuration theory and self-organization / Christian Fuchs // Systemic Practice and Action Research. 2003 V. 16 № 2. P.133-167.
- [5] Fox C. Postmodern Public Administration / Charles J. Fox. Prentice-hall of India: Pvt Ltd., 2007. – 172 p.
- [6] Miller H. Postmodern Public Administration / Hugh T. Miller, Charles J. Fox. Armonk, NY: M. e. Sharpe, 2006. – 157 p.
- [7] Miller H. Postmodern Public Policy / Hugh T. Miller. New York: State University of New York Press, 2002. 132 p.
- [8] Craib I. Modern social theory: from Parsons to Habermas / Ian Craib. Basingstoke, UK: Palgrave Macmillan, 1992. – 276 p.
- [9] Harrington A. Encyclopedia of social theory / Austin Harrington, Barbara L. Marshall, Hans-Peter Müller. – New York, NY: Routledge, 2006. – 760 p.
- [10] Ramani R. Issues and Crises of Public Administration: Codes and Guidelines / Ranjan Kumar Ramani. New Delhi: Cyber Tech Publications, 2007. 296 p.
- [11] Wolf J. Refounding Democratic Public Administration: Modern Paradoxes, Postmodern Challenges / James F. Wolf, Gary L. Wamsley. – Thousand Oaks, CA: Sage Publications, 1996. – 416 p.
- [12]Herrera G. Technology and International Transformation / Geoffrey L. Herrera. New York, NY: State University of New York Press, 2006. 275 p.
- [13] Daly M. Social exclusion and social capital: A comparison and critique / Mary Daly and Hilary Silver // Theory and Society. 2008. Vol. 37. № 6. P.537-566.
- [14] Chopra J. History and Theory of Public Administration / J. Chopra. New Delhi: Commonwealth Publishers, 2004. 342 p.
- [15] Berk G. How people experience and change institutions: a field guide to creative syncretism / Gerald Berk, Dennis Galvan // Theory and Society. – 2009. – Vol.38. – № 6. – P.543-580.
- [16] Dobbin F. The poverty of organizational theory: Comment on: "Bourdieu and organizational analysis" / Frank Dobbin // Theory and Society. – 2008. – Vol. 37. – № 1. – P.53-63.
- [17] Mohr J. How to model an institution / John W. Mohr, Harrison C. White // Theory and Society. – 2008. – Vol. 37. – № 5. – P.485-512.
- [18] Hallett T. Inhabited Institutions: Social Interactions and Organizational Forms in Gouldner's Patterns of Industrial Bureaucracy / Tim Hallett, Marc J. Ventresca // Theory and Society. – 2006. – Vol. 35. – № 2. – P.213-236.
- [19] Hitchins D. A unified systems hypothesis / Derek K. Hitchins // Systemic Practice and Action Research. – 1993. – Vol. 6. – № 6. – P.613-645.
- [20] Polinaidu S. Public Administration / Polinaidu S. New Delhi: Galgotia Publications Pvt Ltd., 2004. – 599 p.
- [21] Conaway V. A Modified Theory of Hegemonic Stability / Vernon W. Conaway. New York, NY. : DEC, 1994. – 192 p.
- [22] Jacob T. Public Administration / T. Jacob. Jaipur: Pointer Publishers, 2007. 214 p.
- [23] Miller G. Handbook of Research Methods in Public Administration / Gerald J. Miller. [2 edition]. – Broken Sound Parkway, NW : CRC Press, 1998. – 672 p.

- [24] Mcnabb D. Research Methods in Public Administration and Nonprofit Management: Quantitative And Qualitative Approaches / David E. Mcnabb. – Prentice-hall of India: Pvt Ltd., 2008. – 485 p.
- [25] Yang K. Handbook Of Research Methods In Public Administration / Kaifeng Yang, Gerald J. Miller. – [2 edition]. – Broken Sound Parkway, NW: CRC Press, 2007. – 992 p.
- [26] Arora R. Modern Encyclopaedia of Public Administration / R. Arora; [set of 5 vols.]. New Delhi: Rajat Publication, 2005.
- [27] Woldendorp J. Dynamic institutional analysis: measuring corporatist intermediation / Jaap Woldendorp and Hans Keman // Quality and Quantity. – 2010. – Vol. 44. – № 2. – P.259-275.
- [28] Smith R. Global human development: accounting for its regional disparities / Robert B. Smith // Quality and Quantity. 2009. Vol. 43. № 1. P. 1-34.
- [29] Bellomo N. From the kinetic theory of active particles to the modeling of social behaviors and politics / Nicola Bellomo, Maria Letizia Bertotti, Marcello Delitala // Quality and Quantity. 2007. Vol.41. № 4. P.545-555.

#### 1.2 Origin and theoretical basis of New Public Management

New Public Management (NPM) is the label given to a series of reforms from the 1980s onwards, to improve the efficiency and performance of western governments and/or public sector organizations.

Nowadays there are many modern concepts of public administration to individual needs and values of different countries. Searching for the optimal model for Ukraine continues because together with society changes, according to new conditions, and its integral part - the public administration. As the response to the crisis in public administration, built on the principles of centralization, became the NPM which has found expression in actions and changes, not the resistance. NPM is a model of governance based on the borrowing practices of corporate governance which apply in business and nonprofit organizations. We believe that it is necessary to note a significant difference between the implementation and functioning of management models in different countries. Ukrainian model of management has not been fully formed yet, but has featured of the European that should be considered in selecting methods of management which can be used in Ukraine. It should be mentioned that the issues solutions of public administration system in Ukraine are in the right direction.

NPM model is associated with intra initiatives in the second half of the 70s of the 20<sup>th</sup> century of the Prime Minister of Great Britain Margaret Thatcher and US President Ronald Reagan. Proposals on reorganization of public administration similar to the model of market institutions were formulated in the US in 1980-1990. The Commission of the US Vice President Al Gore noted that government institutions in America had turned ineffective and closed for a public monopolies and offered to carry out a full reform of the public administration. Later the model "aimed at the result" to the public sector was implemented. Under the result the services provided to citizens and their organizations which provided the satisfaction with the functioning of

government system were understood. In 1993 the US government began to implement reforms called "reinvention". These reforms have had wide-ranging goals - the government had redefined the role of government and its relationship with citizens.

Now we can also hear the definition of "new managerism" which means – ideas of management. Changes based on the so-called the three E (economy, energy and efficiency) and significantly influenced the management role understanding in determining public policy and public servant status.

The main substance of the NPM is to introduce government work all best theories and methods of operation used in business. It should be noted that there is a certain standard model that could work in all countries. Usually these are general approach and position, and every country is looking for own implementation ways according to their own challenges. NPM aim is to minimize government intervention in the economy and maintaining it in the areas where the public considered the feasibility of its presence [1].

In addition, NPM provides management with the minimization of government, de-bureaucratization, decentralization, market orientation in public service, privatization and others. The above mentioned distinguishes it significantly from the traditional management model, the model of administration. Within NPM are also created new management approaches and concepts of "post-bureaucratic paradigm", "public managerism", "market governance", "entrepreneurial government" and others [2]. Consequently, NPM opposed to the concept of the administrative state and used to describe the content of the concept of government "guidance" rather than "administration" or "management". Management in this case means a system of cooperation of public, national and international institutions, private, public and mixed structures to ensure that the public interest and solving social problems [3].

Scholars and practitioners are unanimous that the private sector is more efficient than the state in the allocation and use of resources, and therefore governance may also be more effective if used the example of the private sector.

The difference between the private sector and government is overlooked. It means that in the absence of competitive pressures in the public sector will be suboptimal allocation of resources. Although this model has several directions, all directions are aiming at efficiency and usefulness to society.

Implementation of this model in Ukraine is an extremely difficult task. It should be noted that management must: 1) be a professional way to deal the problems of organization and optimal allocation of resources; 2) be based on scientific knowledge about how to fix problems in most effective way.

As noted above, the main differences of the NPM are, firstly – in the application of business processes and market mechanisms to the public sector, secondly – use of management technologies which are developed by private companies.

The mentioned information applies to the resources reduction and governance – decentralization, delegation of public authority to the market structure, reducing costs of the state apparatus through its restructuring, watching its duties and refusal from some of them which belongs to the social security of population.

It is proposed to use tender, contract system in the civil service, the introduction of payment for certain services as a direction of mechanisms improving of public financial management and budget [1].

A list of the basic principles of new governance were published by K. Huda in a book «A public management for all seasons?»:

- 'hands-on professional management' in the public sector Active, visible.
   Discretionary control of organizations from named persons at the top,
   "free to manage" (Accountability requires clear assignment of responsibility for action not diffusion of power);
- explicit standards and measures of performance Definition of goals.
   Targets, indicators of success, preferably expressed in quantitative terms, especially for professional services (Day and Klein 1987; Carter 1989).

Accountability requires clear statement of goals efficiency requires "hard look" at objectives);

- greater emphasis on output controls Resource allocation and rewards linked to measured performance; breakup of centralized bureaucracy-wide personnel management. (Need to stress results rather than procedures);
- shift to disaggregation of units in the public sector Break up of formerly "monolithic" units, unbundling of U-form management systems into corporatized units around products, operating on decentralized "one-line" budgets and dealing with one another on an "arms-length" basis. (Need to create "manageable" units, separate provision and production interests, gain efficiency advantages of use of contract or franchise arrangements inside as well as outside the public sector);
- shift to greater competition in public sector Move to term contracts and public tendering procedures. (Rivalry as the key to lower costs and better standards);
- stress on private sector styles of management practice Move away from military-style "public service ethic", greater flexibility in hiring and rewards; greater use of PR techniques. (Need to use "proven" private sector management tools in the public sector);
- stress on greater discipline and parsimony in resource use Cutting direct costs. Raising labour discipline, resisting union demands, limiting "compliance costs" to business. (Need to check resource demands of public sector and "do more with less").

In the manuscript of D. Osborna and T. Heblera «Now the Entrepreneurial Spirit is Transforming the Public Sector» scientists proved the presence of new conditions indissoluble link between politics and administration, as well as systematic principles that underlie the theory of NPM:

- catholic Government (to adjust instead following by "downstream"),
- government of communal property (the power instead of service),
- competitive government (introduction of competition in delivery service),

- the managing government (controlled transformation of management organizations),
- the results-oriented Government (funding investment to results but not to inputs),
- government managed by client (meets the needs of the customer, not the bureaucracy),
- enterprising government (earning instead of spending),
- the previous government (prevention (prophylaxis) of trouble instead of treatment),
- the decentralized Government (from hierarchy to participation and interaction).

The scientists identify two trends in NPM reforms: economic – mercerization (introduction of the state apparatus market mechanisms in a wide sense) and organizational – less bureaucratic, which contains the following elements:

- changing the principles of governance organizational structure (decentralization and deconcentration),
- changing structure and content of government functions and structure; arrival of forecasting, strategic analysis, assessment and planning, marketing resources, products, customers, human resources agencies, financial management, etc.,
- changing of units principles (teams, committees and working groups)
   based on qualifications rather than formal criteria,
- changing the planning reporting and controls system,
- changing the system of assessment, promotion and monitoring of personnel,
- changing the system of rewards, installation, depending of their results,
- establishing the dominance qualification criteria for promotion and recruitment,

- increasing of staff mobility,
- the abolition of the instructions and rules that hinder the achievement of objectives,
- review and cancellation kinds of work and operation not focused on the final result,
- total orientation to productivity and quality of work and services,
- reduction of the administrative staff.

Christopher Politt [4] generally considers that NPM is example of managerism, and notes that it is more an ideology than a theory. It is noted that all discussed principles of NPM aimed to reduce the government quantity and to use knowledge which is based on business philosophy.

In modern science of management NPM perceived sometimes as "general management" which provides the basis of similarity in public and private management. The question of responsibility (accountability) or response (with respect to political leaders or to the population) which in this perspective should be in the center of public authorities concerns look less significant. Instead, NPM is based on increasing management opportunities through using management techniques borrowed from a private sector.

It should be noted that the NPM proponents emphasize about separation of commercial functions from nonprofit, political and advisory functions from service provision and regulatory functions. An important component of NPM advocates discipline and frugality in the use of resources. It is considered that mentioned is too important for Ukraine because discipline in this matter is completely absent.

Within NPM was found that the power authorities are not able to respond to modern challenges according to which began to develop the model of good governance. The basic principles of this model recorded in 1997 in documents of UN Development Program (UNDP) [5]:

 participation (all citizens should have the right to vote in decisionmaking),

- the rule of law (honesty and impartiality of the legal structures),
- transparency (the free flow of information that is available to everyone),
- ability to respond (institutions and processes are all stakeholders),
- focus on consensus (model mediates between different interests for reach agreement),
- parity (all men and women have equal opportunities in increasing or maintaining their own well-being),
- the effectiveness and efficiency (processes and institutions satisfy the needs in the best use of resources),
- accountability (those who make decisions are accountable to the public and stakeholders),
- strategic vision (leaders and the public have a wide and relatively longterm perspective according models and human development).

It means the relationship between the state and citizens. It should be noted that communities in Ukraine need to learn how to make decisions and not shift their responsibility to the central government.

So, we would like to form the scheme of their own vision of basic education NPM levels (Fig. 1.1), based on foundation of "public administration" and which competes with such areas as good governance, the policy network and others.

In turn, we agree with the authors that claim that NPM has already reached its extremum and is currently declining. In 2005, Patrick Dunleavy, professor of political science and public policy within the government department of the London School of Economics (LSE) published an article entitled «New Public Management is Dead – Long Live Digital-Era Governance» (Dunleavy et al., 2005). As the title of this article suggests, professor Dunleavy proposes that the organisational paradigm of new public management has become obsolete [6]. Professor Dunleavy is critical of new public management. Because there is new public management, there must have been "old" public management.

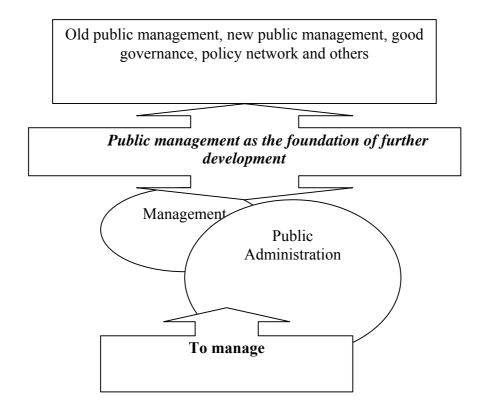


Fig. 1.1 Basic level of formation NPM

The traditional theory of public management – without the term new – stated that politics is important for understanding how public organizations operate. Initially, public organizations were studied with the help of theories originally developed to explain the workings of the private sector as there was not enough knowledge about the functioning of public organizations in a political context. Public management theory brought politics into the analysis [7].

Economist Ha-Joon Chang in his book «Bad Samaritans» says that NPM increases, instead of decreasing, corruption and, as a result of increased contacts functionaries of the public sector with the private, creating additional conditions for bribes.

It is also mentioned that the effectiveness of NPM observed only in certain sectors of public administration (water, health). The problem is in difficulty determining exactly what has improved as a result of system changes.

Thus, from our point of view all scientists, proponents of NPM and opponents, are right, but the main thing should be noted – for replacing NPM

has come new theories and approaches that better suit for current requirements of humanity, there is still using some effective tools NPM (about which was mentioned before) in management practices which contain its negative effects (see Ha-Joon Chang «Bad Samaritans») [8], which were discovered in the reform process of other countries may lead to positive changes in Ukraine.

## References

- [1] Воробйова О. Сучасні управлінські моделі new public management i good governance та їх запровадження в Україні [Електронний ресурс] – Режим доступу до матеріалів : http://www.lvivacademy.com/vidavnitstvo\_1/edu\_42/ fail/28.pdf]
- [2] Кухарева Г.П. Упровадження нового публічного менеджменту у світову та вітчизняну практику публічного управління [Електронний ресурс] Режим доступу до матеріалів : http://www.kbuapa.kharkov.ua/e-book/apdu/2015-1/doc/1/06.pdf
- [3] Менеджмент організацій і адміністрування : підручник [Електронний ресурс] Режим доступу до матеріалів: http://pidruchniki.com/74963/menedzhment/ menedzhment\_organizatsiy\_i\_administruvannya
- [4] The New Public Management: An Overview of Its Current Status Christopher POLLITT Public Management Institute, Katholieke Universiteit Leuven [Електронний ресурс] – Режим доступу до матеріалів: http://citeseerx.ist.psu.edu/viewdoc/download?doi= 10.1.1.536.2400&rep=rep1&type=pdf
- [5] Програма розвитку ООН в Україні [Електронний ресурс] Режим доступу до матеріалів: http://www.ua.undp.org/content/ukraine/uk/home.html
- [6] Dunleavy, P. et al. (2005), "New Public Management is Dead Long Live Digital-Era Governance", Journal of Public Administration Research and Theory, September. https://www.oecd.org/gov/budgeting/48168865.pdf
- [7] Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism Paperback – December 23, 2008 [Електронний ресурс] – Режим доступу до матеріалів: https://www.amazon.com/Bad-Samaritans-Secret-History-Capitalism/dp/ 1596915986?ie=UTF8&\*Version\*=1&\*entries\*=0
- [8] Андрій Попок Сучасні підходи до здійснення реформування державного управління: досвід зарубіжних країн [Електронний ресурс] Режим доступу до матеріалів: http://www. Vnadu\_2012\_2\_4.pdf

## 1.3 The economic essence and evolution of the category of "human potential" in context of public management

In the system of factors of the national wealth the productive forces which are generated by population, are the real asset that can provide a high level of development and prosperity of the state even in the relative scarcity of their natural resources. This thesis is well-established and well-known in modern economic research. However, dynamic changes in the area of human existence cause loss of relevance of traditional for "human capital" concepts idea of a man as a resource which is "consumed" in a specific way in the process of production or social nature.

Theoretical principles on human capital offered by T. Schultz [1], [2], G. Becker [3] and others authors made a breakthrough in economic science in due time. But at the current stage of development of civilization there is a gradually shift in scientific interest favourable to their intensification and expansion with the use of more advanced terminology (e.g. living standards, quality of life, human development) oriented to a person, the conditions of his or her formation and improvement, rights and freedoms as a prerequisite for achieving economic prosperity. Therefore, the category of "human development" has become more popular among the contemporary authors' study. It not only contains within itself these aspects but also allows fully reflect the unique and exceptional importance of a man to ensure the release of the national economy into a trajectory of high-tech, creative growth within sustainable development.

Despite the relevance and practical value of human potential its research tools have not yet been fully formulated and require deeper scientific justification. In the late 1990s, G.B. Solnceva and G.L. Smolyan argued that usage of this notion has "vague and mainly publicistic context" [4, p. 59]. But since then nothing much has changed. Currently there is neither generally accepted terminology interpretation of "human development", nor analytical approaches for the development of methodology for its assessment. Nor is there

any single measure to determine the level of its development. Decision-making mechanisms in governmental regulatory activity related to the economy on the principle of a balanced private and public interests remains not sufficiently worked out. This results in a need to continue scientific research for further development of the theoretical basis of the concept of human development acceptable to address not only current but also forward-looking problems in the system of national economy promotion.

Although the theory of human development is notable for relative novelty, its basic tenets have deep roots. The search for ways to improve the certain aspects of effectiveness has existed since prehistoric times. First profound ideas about human development emerged in the works of the ancient sages, including Ancient Greece. Thus, in the writings of Aristotle the idea of secondary importance of economic development and its supporting role in achieving the ultimate goal was launched. In "Nicomachean Ethics" philosopher wrote: "... Wealth – this is not the desired good because it is useful, that is, it exists to serve something else". To explain the purpose of economic development Aristotle used the term "eudaimonia" (eydaimonia) as a condition of the highest good, which comes as a result of proper mental and physical human being and promotes universal prosperity and welfare. He used this term to study the subject and the ultimate goal of science of the state: "... we felt that science of the state was a supreme good, because that's what this science is mostly focused on to create the citizens of certain quality, that is virtuous and those that perform wonderful deeds" [5].

Of course, this theory is rather abstract and contains elements that go far beyond this study as it includes a specific view of human nature and philosophical rumination on virtue. However, it carries the progressive vision of the quality of human life as a set of specific activities that have the appropriate value for the public welfare and their potential implementation using instruments of state influence. But Aristotle's ideas had remained forgotten for a

long time, because economics from the outset took care of issues of enrichment for a nation.

At the end of 19<sup>th</sup> century quality of life was associated mainly with the possibility of consumption and welfare of the nation identified with economic wealth. That is reflected in the ideas of the representatives of classical political economy. This idea can be seen in the research of A. Smith who defined the wealth as one of the possible ways to improve the life. Nevertheless scientist recognized that "... no society can flourish and be happy if the most significant members of it are poor and unhappy" [6, p.17]. Smith noted the importance of population diversified development because daily grind and limited vision threaten, ultimately, national interests [6, p. 557]. The state was given a central role which according to Smith was assigned functions of human development including through the provision of public education: "Education of ordinary people in the civilized and commercial society ... requires attention and assistance of the state ..." [6, p. 558].

J.St. Mill, developing the ideas of A. Smith in line with humanism, wrote: "Man serves the purpose for which wealth exists. But his acquired abilities, which act only as agent and which are implemented only through the work, rightfully can be attributed to capital category" [7, p.151].

Based on the analysis of predecessors' economic ideas, Marx argued that the main capital that is a source of added value formation (and hence the growth of national income – *note of the authors*), is a man, his creative skills accumulated over many generations [8, p.221].

Further development of scientific statements which now form the basis of the theory of human development was directly or indirectly held within many economic schools. For example, there is a provision in a study of one of the founders of neoclassical economic theory A. Marshall as follows: "Production of the wealth – is only means to support human life, to meet its needs and to develop its forces – physical, mental and moral. But the man himself is the main

means of producing such wealth, who also serves as the ultimate goal of wealth." [9, p. 210].

J.M. Keynes considered development and implementation of human capabilities, empowering of personal choice as the most important conditions for economic growth: "... individualism ... extremely expands opportunities for personal choice ... This diversity keeps traditions, embodying the most appropriate and successful range of previous generations ... and being a servant of experience in the same way as tradition and imagination, it is the most powerful means to achieve a better future [10, p. 239].

Summarizing the views of Adam Smith and his followers we can say that a person is slowly coming to be seen not just as a producer of national wealth but also as its integral part. However, despite the progressive ideas of reputable economists, views that have been initiated and developed by the supporters of the theory of economic development had been dominating on the general political level of the majority of industrialized countries up to 1980s. Its main message can be sent through the rhetorical question posed by one of the most prominent representatives of this trend W.A. Lewis: "Is it true that economic growth is desirable?" ... The author provides positive response to it, claiming that the result of economic growth will be "a huge increase in the material and cultural level of the population" [11, p. 431]. Although this quote implies that economic growth is not an end but rather a mean to achieve other goals of a social nature such ideological conviction led to the fact that the accumulation of wealth in the form of financial and material capital was seen as a versatile and leading factor that determines the progress of society. However, surprisingly that factor analysis of the sources of growth of material wealth summarized the researchers to a new perception of the role and importance of a man in economy.

The point is the conceptual drawing of the human development theory took place over "human capital" category. Works of American economists T. Schultz, H. Becker, B. Weisbrod, J. Mincer and others have served as the impetus to its allocation. The sequential search for sources of increasing productivity had allowed T. Schultz to identify unknown parameter – "residual factor" which was later identified as ability to work which is being acquired and developed for a lifetime [1], [2]. Thanks to scientific research of T.Shultz's followers, especially G. Becker, the definition of human capital as a combination of knowledge, skills, qualifications which are available and inseparable from their carrier – a man and allow to perform dual function of means of production and durable goods, was formulated [12].

Human capital relates to the use of resources, and therefore - to the costs. To ensure investment in human capital for its accumulation and expanded reproduction, future benefits should offset the necessary costs. According to the theory of "human capital", its accumulation can be exercised in various forms. The most obvious of them is the accumulation of capital (development of abilities and skills) during school and after school, as well as the acquisition of knowledge and skills in the course of occupational activities. Such is even a preliminary and accompanying family education. There are other forms: health care (investment in health), migration, acquiring information about the economic performance, labor market and other forms that ensure the development of intellectual and physical abilities and their feasibility, efficiency of work. You may accept or not to accept such logic, but let's face it, the concept of "human capital" has become a landmark in the overall trends concerning attitudinal change in respect of education, health, culture and other areas of social infrastructure in terms of resource provision [13, p.13]. Scientific achievements in the theory of human capital are valuable primarily through proper understanding of the importance of knowledge, competencies, skills, and so on, as a fundamentally important source of economic growth that had previously were perceived as unproductive, and thus as futile in terms of profitability and, therefore, unattractive to investors.

Considering the preconditions for the terminology allocation of "human potential", attention should also be drawn to the research of the representatives of humanistic psychology, which began in the 1960s. Thanks to such scientists

as A. Adler [14], A.K. Sagan [15], A. Maslow [16], G. Murphy [17], J. Nunnalli, [18], C. Rogers [19] and others, belief in the huge untapped potential of mankind was gradually being cultivated in society. The latter, in the case of the creation of appropriate conditions, is able to overcome significant barriers and considerably increase productivity. The central idea within the psychological approach to understanding of human development is hierarchical sequence of motifs sets focused on gradual use the full potential of human capabilities with the meeting of lower level needs of, known as "Maslow pyramid" [16].

The value of psychological approach as a way to understand the economic substance of human development is awareness of the possibility of targeting the processes of formation of human potential to improve human performance (fig. 1.2).

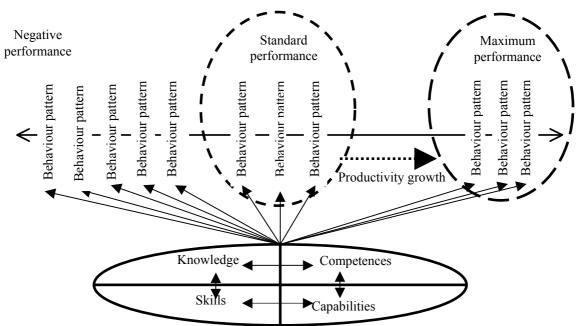


Fig. 1.2 The spectrum of human performance and capabilities of its development

Every personality during the lifetime is able to enforce a vast variety of behavior patterns, which include knowledge, skills, competences, ranging from simple (such as reading skills in their native language) to more difficult (learning foreign languages). Depending on the natural and acquired abilities to perform certain tasks, the individual pattern of behavior can be displayed as a point that lies in the range of low to maximize performance. Although the spectrum used in the scheme may seem too simplistic, it shows that the pattern of behavior which is closer to the point of maximum performance will be more effective and show better results than those that are closer to the extreme left point. Thus the main purpose of the productivity growth or commitment to maximum performance it is not so much to create conditions for changing its vector from the negative to the positive direction as to stimulate people to go beyond the standard level in order to achieve optimal, close to the maximum, level [20, p. 3].

Scientists who studied human development, had a common belief that people generally use only a small part of it. The study supporters of this idea was built on an effort to achieve its maximizing, so there was movement for human potential resulting in the establishment of the so-called "growth centers" in USA during the 1960-1970. Over there various methods of activation of "peak experiences" and "vitality" were practicing for a fee. The result of such practices, as expected, was to be a positive growth of creative customers. However, in the late 1970s this movement began to curl. His supporters were subjected to sharp criticism for incorrect and insufficient validity of practice in mobilizing, unlocking human potential. Beyond the analysis were also questions about the possibility of forming and effective use of human potential [21, p.89].

However, the development of the fundamental principles of humanistic psychology was a major contributor to rethinking the role of the human factor in economic processes. As opposed to the supporters of the theory of economic growth, a plethora of scholars appeared. They constructively criticized the stereotype of prioritization the task of achieving economic growth and, consequently, of secondary importance and dependence on it freedoms, social support [22], [32]. Thanks to the persuasive arguments of supporters of the concept of human development, a man is coming to be seen not only as a functional component of the economic mechanism, but as a major source of

national wealth [33]. And the use of "human development" category to study and identify patterns of development of the national economy is promoted.

It was noted in the work of the ideological leader of the human development concept A. Sen: "Countries with high GNP per capita can nevertheless have astonishingly low achievements in the quality of life...Economic prosperity is no more than one of the means to enriching the lives of people... Moreover, the level of development of human development determinants (education, health, the degree of realization of human rights and freedoms etc.) directly influences the socio-economic progress of the state". Thus, A. Sen launched the theory of human development, which focuses the goals of public policy must be subordinate to the purpose of higher level – the development of human capabilities, free choice of a set of alternatives to their use over a lifetime. Government would act as creator of favorable "background" for human development, namely: improving nutrition, education, health care and overcoming barriers to self-fulfillment (e.g. participation in public life, public associations etc.) [30].

Sen's ideas have been world-widely acknowledged. "The real wealth of the nation – is its people. The goal of development is to create environment conducive to a long, healthy and creative life. This simple but important truth is often forgotten in achieving physical and financial well-being" – was announced in 1990 in the first report of UNDP [34]. This had allowed to create one of the most intelligent products – the concept of human development, which replaced the concept of providing minimum needs set out in the Social Security (Minimum Standards) Convention of International Labour Organization in 1952 [35].

The concept of human development is to create such political, economic, social, cultural and environmental protection which would allow people to ensure the material well-being and opportunity to enjoy a healthy and creative life long enough. It is based on four main principles that reflect productivity, equity, sustainability and empowerment.

Productivity – people should be able to improve productivity of their own work, to participate fully in the process of income generation and to work for fair and adequate compensation because economic growth is one of the components of human development models.

Equity – all men from birth should have equal opportunities, so any barriers that inhibit people from opportunities in the economic, social and political life and, consequently, obtaining the relevant benefits, are liable to liquidation.

Sustainability – access to capabilities should ensure a harmonious combination of economic, social and environmental interests of both present and future generations.

Empowerment – development should be provided by combining the efforts of people to realize their interests, so it is necessary to provide full-scale participation of people in decision-making processes and other processes that affect their lives [36, p.32].

As it was rightly noted by Mahbub ul Haq – one of the most eminent researchers in the field of human development, the initiator of annual reports on human development – "Today the concept of human development is the most holistic model of development. It includes all development issues, including economic growth, social investment, empowering people, meeting the basic needs and the organization of social protection systems and all other aspects of life" [37, p.13]. In other words, the concept of human development organically combines in itself the best achievements of previous economic theories, forcing them to serve for the benefit of a man. The main differences of the concept from other theories are reflected in table. 1.1.

It is clear that ontological ideas about human potential, its nature, structure and level of government will influence the strategy of its formation and use [38, p.53]. Given the relative novelty of the research economic category, the formation of adequate logical conclusions about the meaning of human

development processes in the system of the national economy has yet to be specified.

Table 1.1

Comparative	analysis	of k	basic	economic	theories	and	concepts of l	numan
development								

Theories	The role of a man	The ultimate goal	Indicators of goal	The task of public policy
name			achievement	
The theory of	The driving force,	Improving quality	Physical growth of	Distribution of goods, services,
economic	factor of economic	of life in the	GDP / GNP	cash flows, creating special
growth	growth	conditions of the		conditions for specific sectors and
		continuing growth		industries, as well as the
		of the population		implementation of the system of
				preferences
The theory of			Productivity growth	Development of unattractive for
human capital		capital cost, income		the private sector spheres of social
		of the owner and of		infrastructure, where human
	and investment	the society		capital is accumulated and
				developed
The concept of		Improving the	Poverty reduction	Providing of minimum social
basic needs		living conditions for		benefits, employment, provision of
	the recipient of	the poorest sectors		minimum required social services
	benefits	of society		in education and health
The concept of		Maximizing of	The degree of	Creating the conditions for the
well-being	economic growth,	welfare	satisfaction of people	
	the recipient of		with their lives.	mechanism of formation of
	benefits		Standard of living	welfare, its adjustments according
				to changes in the conditions of
				development, societal norms and
				values
The concept of		The growth of	The level of	Building of institutional system
human	purpose of	human capabilities	implementation of	and budgetary framework, which
development	development	and their expanded	and freedoms and	allow to achieve the desired ratio
		use	choices of man	between different types of social
				spending

Analyzing the content of the most common theoretical approaches to the definition of "human capital" and its structure, it is difficult not only to come to definitive conclusions regarding the economic substance of human potential, but also to provide a holistic view of its differences from the category of human capital.

Recent studies show that this is often the dominant approach (is seen in the works of A.A. Verenikina [39], Zh.V. Derii [40], I.D. Zakirov [41], I.V. Soboleva [42], K.K. Colin [43, p.3], E.S. Kotyrlo [44, p.2], L.V. Rudych [45, p.171] and others) to determine the human potential as a certain set of functional properties of the human person that had already been accumulated, that is a

stock that is used in different areas to meet different needs, achieve certain goals. Such determinations are pretty reasonable from the viewpoint of human potential capitalization when the functional properties of its carriers are identified and fully implemented in a variety of activities. We mean they take into account only the actual component of human potential. But in terms of actualization human potential can be not only factual, but also prospecting and latent. For example, in Big explanatory dictionary of modern Ukrainian language, the term "potential" is defined at the same time as the set of all available means, opportunities, productive forces, and so on which may be used in any industry, region, area; stock of anything, reserve; hidden ability, force for any activity that may occur under certain conditions [46, p. 1087]

Prospecting human potential is relatively certain human potential, which is under formation, but has not been implemented yet, only projected and programmed in various projects of social and economic development. The latent (hidden) human potential is potential, which is not defined, not found and not claimed by society at this stage of development, but such a potential that may appear in changing external conditions [47]. These components certainly should be taken into account, since any economic system sooner or later reaches the point where prospecting potential turns into actual and latent forces involvement is a factor for further development, and sometimes a condition of survival. This is particularly important in developing measures of state regulation, reserving a special place for these components of human potential. Although it is impossible to predict when and how they will work, but at the right time knowing where potentials are hidden we can use them.

One of the possible expressions of the human capital is used by A.B. Doktorovich: "Human Potential of society is the stock of knowledge, experience, information, motivation, confidence accumulated by society, including cost and spiritual, moral, unselfish relations based on spiritual beliefs, traditions, consciousness, responsibility, honesty, friendship and love, which play a role in the workplace, but may be involved more to ensure functioning of

the socio-economic system in extreme conditions (war, natural disasters, the global financial and economic and other crisis)" [48, p. 400]. This interpretation like previous, focuses on the specific properties of human potential to ensure the sustainability of society through the actual stock of properties and qualities. However, they extend the understanding of this category, without limiting its scope achieved progress, pointing to the important ability of functional properties of human potential to extend beyond obsessive.

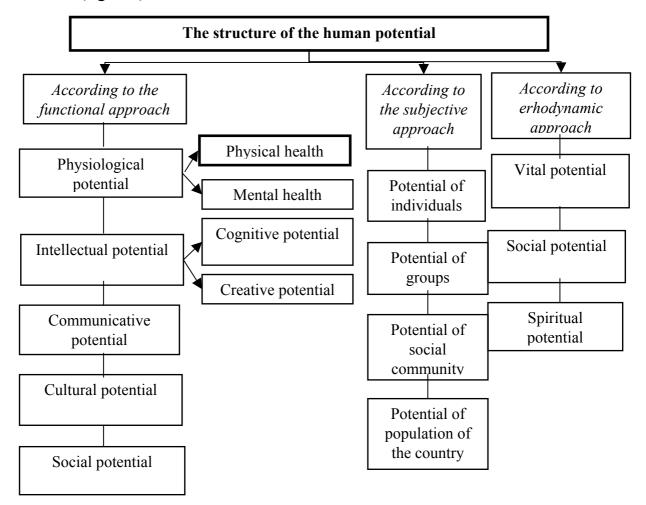
In addition, the focus of the above-mentioned researchers is mostly on internal structure of human potential, i.e. the functional components that allow it to perform certain tasks to achieve a specific goal (reproduction, social development, etc.). This, in turn, closely approximates the concept of human potential to the human capital and leads to terminological uncertainty, when the same content is embedded in fundamentally different concepts. Potential approach to the definition of human capital also is used by Korolenko R.V. [49, p.191].

Because such examples are not exceptional, it should be emphasized that although the theory of human capital often serves as a methodological basis for the analysis of phases and factors of human capital reproduction, from the standpoint of state regulation of the economy these categories are fundamentally different.

However, the use of the "opportunities" concept as a key to characterize the human development does not always fully reflects its specific features, sometimes creating an unnecessary focus on the achieved level of development of a "human essence". This creates the false impression that the qualitative features of human potential are fixed in time waiting occasional moment (favorable conditions) for its expression. But the fact human potential is consistent "dynamism, ability to develop, strengthening its role in the world community" [38]. It is a "alive and living substance, which expresses itself, reminds itself all the time, but in different situations differently", acting at the same time as a source of human activity, and one of its assets, and its stock [47,

p. 35-36]. The kind of human potential we deal with as well as its carrier, subject should be clearly defined: population of the country, of some regions of the country; some social communities; small social groups or only individuals.

Considering options for structuring of the human potential, it may be noted the prevalence of functional and subjective approaches in the scientific literature (fig. 1.3).



## Fig. 1.3 Approaches to the structuring of human potential

With regard to the subjective approach, a number of scientists do not consider human capital at a level different from society as a whole. For example, E.A. Kataytseva believes that "human capital – is the only substance that is the basis of life as all of its parts – personal potentials and of itself as a whole" and

thus its independent existence "as the total of the parts, and the parts of the total" is impossible [47].

T.I. Zaslavskaja notes that "the idea of the potential is a co-dimensioned, first of all, to a nation-state. It is applied neither to the individual nor to a small group, but it is suitable for the use in relation to the large social systems – countries, nations, states, classes, large cities or regions" [52, p.13].

Although these authors' postulate of the impossibility of reducing of aggregate amount of human potential to the amount of individual personal potentials, seems only logical, A.I. Ivanov perspective about the "reality of the existence (and hence the feasibility of allocation and a separate study – note of the authors) of individual human potentials" should be accepted [38, p.33]. So pretty reasonable is allocation within a subjective approach of four kinds of capabilities, each of which is a relatively independent of the others, but in certain circumstances can interact with them. These are: potential of individuals; Potential of groups (the potential of social groups, groups whose activities are carried out in the organizational framework of a limited social space); potential of various social communities (socio-demographic, socio-territorial, socioprofessional, social class, whose representatives life activity is not governed by formal and informal institutional framework and takes place in different locations, fields of social space); the human potential of the entire population of the county as a special kind of social integrity. The last of these potentials is a type of human potential and is not identical to the total capacity of human society [38, p.33].

Subjective approach to structuring defines possibilities and limits of targeted intervention in human potential. It is worthwhile provide a statement of T.I. Zaslavskaja about the "inertia" of this societal sign of society because it is "fixed in such physical and spiritual qualities of the citizens, much of which depends on the gene pool of the country, the conditions of socialization of new generations and features of national culture. The nature of mentality, values structure, types of personalities are changing relatively little during the life of

people. They are largely passed from generation to generation". Therefore, not only greater effort should be made to increase human potential by improving individual structural components, but substantial time required [52, p.12]. It follows that direct impact could be provided just on individual potential and on potential of small groups, different social organizations (companies and associations in various forms), while the human potential of large social communities may be formed only indirectly.

In the context described above, we attach such a meaning of "human potential" notion: it is complex set of functional properties of the society whose opportunities for their realization depend on the current socio-economic conditions, resource support and other factors, manifest themselves in the volumes and directions that are crucial for achieving the highest social goal – providing full longevity in an environment comfortable for free, harmonious and creative development of a human being.

Harmony as part of a proportionality of the parts of the whole implies optimal balance of spiritual and social principles in human life, i.e. human harmony with itself, with other people and the nature. Harmonious man most fully uses the original "safety margin" of his life, his vital potential. He is able to completely fulfill his life's purpose: to increase the "safety margin" in general, to accumulate human capital of societies, to develop himself, to live more full inner life [53, p. 236].

Summarizing, we can say that human development is an important issue on the agenda of the international community, which is the logical consequence of socio-economic and political processes and ideological shifts in vision of the human being. When competition between national economies is moving beyond traditional factors of competitiveness, exectly human potential is that socioeconomic nature, which plays a leading role in the future development of the country.

## References

- [1] Schultz, T. (1960), "Capital Formation by Education", Journal of Political Economy, vol. 68, pp. 571.
- [2] Schultz, T. (1961), "Investment in Human Capital", The American Review, vol. 1, pp. 1-17.
- [3] Becker, G.S. (1962), "Human Capital: A Theoretical Analysis", The Journal of Political Economy, vol. 70, pp. 9-49.
- [4] Solnceva, G.B. and Smolyan, G.L. (1999), "Chelovecheskij potencial: razmyshlenija o soderzhanii ponjatija", in. Frolov, I.T. (Ed.), Chelovecheskij potencial: opyt kompleksnogo podhoda, Jeditorial URSS, Moscow.
- [5] Aristotle, (1997), Nikomahova jetika [Nicomachean ethics], translated by Braginska, N., JeKSMO-Press, Moskow.
- [6] Smith, A. (2007), Issledovanie o prirode i prichinah bogatstva narodov [An Inquiry into the Nature and Causes of the Wealth of Nations], JeKSMO, Moskow, Russia.
- [7] Mill, J.S. (1980), Osnovy politicheskoj jekonomii [Principles of Political Economy], edited by Milejskijó A.G., Progerss, Moscow.
- [8] Marx, C. and Engels, F. (1969) Jekonomicheskie rukopisi 1857-189 gg. [Economic manuscript 1857-189 years], vol. 46 p. II. Politizdat, Moscow.
- [9] Marshall, A. (1993), Principy jekonomicheskoj nauki [Principles of economics], vol. 2, Progress Univers, Moscow.
- [10] Keynes, J.M. (2017), The General Theory of Employment, Interest, and Money, available at: http://cas.umkc.edu/economics/people/facultypages/kregel/courses/ econ645/winter2011/generaltheory.pdf (Accessed 03.02.2017)
- [11] Lewis, W.A. (1955), The Theory of Economic Growth, Allen and Unwin, London.
- [12] Becker, G.S. (1962), "Human Capital: A Theoretical Analysis", The Journal of Political Economy, vol. 70, pp. 9-49.
- [13] Chelovecheskoe razvitie: novoe izmerenie social'nojekonomicheskogo progressa. Uchebnoe posobie (2008) [Human development: a new dimension of social and economic progress], 2nd ed., edited by Kolesov, V.P., Human Rights, Moscow.
- [14] Adler, A. (1969), The Practice and Theory of Individual Psychology, Adams, NJ: Littlefield.
- [15] Carl Sagan's 1981 Humanist oh the Year Speech (2017), "American Humanist Association", available at: http://americanhumanist.org/HNN/details/2012-05-from-theaha-archives-carlsagans-1981-humanist-of-t (Accessed 03.02.2017)
- [16] Maslow, A.H. (1968), Toward a psychology of being, 2nd ed, D. Van Nostrand, New York.
- [17] Murphy, G. (1953), "Human potentialities", Journal of Social Issues, vol. 9, Iss. S7, pp. 4-19.
- [18] Nunnally, J. and Lemond, L. (1974), "Development behavior and human development", Advances in Child Development and Behavior, vol. 8, pp. 59-109.
- [19] Rogers, C.R. (1959), "A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework", In (ed.) S. Koch, Psychology: A study of a science, vol. 3: Formulations of the person and thesocial context, McGraw Hill, New York, pp. 184-256.
- [20] Vernon, D. (2009), Human Potential: Exploring Techniques Used to Enhance Human Performance. Routledge, London & New York.
- [21] Ivanov, O.I. (2014), "Human potential: the theory and methodology of the study", Sociological studies, vol.6, pp.89-95.
- [22] Adelman, I. (1975), "Development economics: a reassessment of goals", American Economic Review, Papers and Proceedings, vol. 65(2), pp. 302-309.

- [23] Adelman, I. and Taft, C. (1974), Economic Growth and Social Equity in Developing Countries, Stanford University Press, London.
- [24] Chenery, H. (1974), Redistribution with Growth, Oxford University Press, London.
- [25] Grant, J.P. (1978), Disparity reduction rates in social indicators: a proposal for measuring and targeting progress in meeting basic needs, Overseas Development Council, Washington.
- [26] Keith, G., Griffin, K. and A.R. Khan (1978), "Poverty in the third world: Ugly facts and fancy models", World Development, vol. 6, issue 3, pp. 295-304.
- [27] Lipton, M. (1968), "Assessing Economic Performance", Journal of the Royal Statistical Society. Series A (General), vol. 131, No. 4, pp. 620-622.
- [28] Morris, D.M. (1979), Measuring the Conditions of the World's Poor: The Physical Quality of Life Index, Pergamon, Oxford.
- [29] Osmani, S.R. (1982), Economic Inequality and Group Welfare, Clarendon Press, Oxford.
- [30] Sen, A. (1989), "Development as capabiliy expansion", Journal of development planning, vol. 19, pp. 3-16.
- [31] Streeten, P. (1981), Development Perspectives, Macmillan, London.
- [32] Streeten, P. (1979), The Frontiers of Development Studies, MacMillan, London.
- [33] Buharova, E.B. and oth. (2013) Ocenka faktorov i ogranichenij strategicheskogo razvitija chelovecheskogo potenciala i predprinimatel'skoj sredy resursnyh regionov: monografija [Evaluation of factors and strategic development of human capacity constraints and the business environment for resource regions: monograph], Sib. Feder. Univ., Krasnoyarsk, Russia.
- [34] Human development report 1990 (1990). Oxford Oxford University Press, New York.
- [35] Convention concerning Minimum Standards of Social Security (1952), available at: http://zakon5.rada.gov.ua/laws/show/993\_011 (accessed 03.02.2017).
- [36] Jakunin, V.I., Roik, V.D. and Sulashkin, S.S. (2007), Social'noe izmerenie gosudarstvennoj jekonomicheskoj politiki [The social dimension of public policy], Publishing house "Economy", Moscow.
- [37] Haq, M. (1995), Reflections on Human Development, Oxford Oxford University Press, New York.
- [38] Ivanov, O.I. (2013), Chelovecheskij potencial (formirovanie, razvitie, ispol'zovanie) [Human Potential (formation, development, use)], Skifija-print, St. Petersburg, Russia.
- [39] Verenikin, A.O. (2005), "Human Potential of Economic Development", Abstract of Doctor's Dissertation, Economic Theory, Lomonosov Moscow State University, Moscow, Russia.
- [40] Derii, Zh.V. (2013), Kapitalizatsiia liuds'koho potentsialu: teoriia, metodolohiia, praktyka: monohrafiia [Capitalization of human development: theory, methodology, practice: Monograph], Chernihiv State University of Technology, Chernihiv, Ukraine.
- [41] Zakirova, D.I. (2012), "Human potential as a factor in improving the competitiveness of the Republic of Kazakhstan", Abstract of Ph. Dissertation, Economy, University Turan, Almaty, Kazakhstan.
- [42] Soboleva, I.V. (2007), Chelovecheskij potencial rossijskoj jekonomiki: problemy sohranenija i razvitija [Human potential of the Russian economy: problems of preservation and development], Nauka, Moscow, Russia.
- [43] Kolin, K.K. (2003), "Human potential and innovative economy", The journal "Bulletin of the Russian Academy of Natural Sciences", vol.4., available at: http://elibrary.lt/resursai/Uzsienio%20leidiniai/NKIR/2003\_4/irr03\_01.pdf (Accessed 3.02.2017)
- [44] Kotyrlo, E.S. (2011), "Human potential and human capital as a scientific categories", Audit and financial analysis, vol.6., available at: http://www.auditfin.com/fin/2011/ 6/2011\_VI\_10\_08.pdf (Accessed 03.02.2017)

- [45] Rudych, L.V. (2009), "Human potential: the nature and components", Scientific works "Bulletin ChSTU. Series: Economics", vol. 22, p. 1. pp. 170-172.
- [46] Busel, V.T. (Ed.) (2001). Velykyi tlumachnyi slovnyk suchasnoi ukrainskoi movy [Big explanatory dictionary of modern Ukrainian language], WTF "Perun", Irpin, Ukraine.
- [47] Katajceva, E.A. (2009) "The essence of the concept of "human capital", the Bulletin of the Russian Academy of Public Administration under the President of the Russian Federation, vol. 6, pp. 30-35.
- [48] Doktorovich, A.B. (2006), "Human Potential", in Social Policy: Encyclopedia, ed. by Volgin, O.N. and Sulimova, T.S., Alpha-Press, Moscow, Russia.
- [49] Korolenko, R.V. (2013), "Theoretical approaches to the definition of "human capital", Innovative Economy, vol. 2, pp. 189-192.57.
- [50] Akopjan, A.S. (2011), "Human capital and biosocial determinants of population", History and modernity, vol.1, pp.68-92.
- [51] Gulin, K.A., Shabunova, A.A. and Chekmareva, E.A. (2009), Trudovoj potencial regiona [Labour potential of the region], edited by Il'in, V.A., ISJeRT RAN, Vologda, Russia.
- [52] Zaslavskaja, T.I. (2005), "Human potential in the modern transformation process", Social studies and the present, vol. 3, pp.5-16.
- [53] Bushuev, V.V. and Golubev, V.V. (2007), Socioprirodnoe razvitie (jergodinamicheskij podhod) [Socio-natural development (ergodynamic approach)], Izdatel'stvo "IAC "Jenergija", Moscow, Russia.

## CHAPTER 2 MODERN APPROACHES TO THE TRANSFORMATION OF PUBLIC MANAGEMENT PROCESSES: STATE AND REGIONAL LEVEL

# 2.1 Project approach to implementation of enterprises' anti-crisis strategy within the regions' public policy

During recent years the number of small businesses in Chernihiv region has increased, namely from 4712 units in 2010 to 5835 units in 2013 (93.8% of the total number of enterprises). According to preliminary data this index amounted to 5780 units in 2014. In 2013 the number of medium enterprises decreased by 46 units as compared to 2012, and amounted to 380 units (6.1%). According to preliminary data by the end of 2014 this index also amounted to 380 units. The work of small and medium businesses has a social effect for the region in the form of new work places. In 2013 the average number of employed workers amounted to 37.1 thousand persons working at small businesses. As a result of poor socio-political situation in the country, labor market has undergone changes. The number of employed workers at medium enterprises was decreased during the period of 2010-2013, namely from 78.8 thousand persons in 2010 to 61.6 thousand persons at the end of 2013.

Small and medium businesses provide economic benefit to the region in the form of budget receipts. In 2013 revenues to local budgets from small businesses increased in most districts and towns and amounted to 353.1 million UAH (hryvnias) (22.2% of the total number). The role of medium businesses in the formation of local budget receipts has increased. Total income to the local budget from the medium business amounted to 358.2 million UAH (22.5% of the total number) by the end of 2013 which is more by 102.7 million UAH in comparison with 2012.

Thus, small and medium enterprises influence the formation of almost half of income to the local budget. Therefore, in times of crisis economy and decentralization the development of enterprises is an important factor in ensuring the viability of the region. It causes the necessity to use modern systems of support of small and medium businesses in the conditions of unstable environment.

According to the Regional program of development of small and medium enterprises for 2015-2016 it is necessary to support business in accordance with the following directions: 1) arrangement of regulations; 2) providing with financial, credit and investment support; 3) arranging of resource and information provision; 4) establishment of business support infrastructure; 5) improving of providing administrative services system. These directions should be implemented at the regional level.

The following Ukrainian scientists researched the problem of management of small and medium enterprises: I. Mantsurov [1], T. Berezyanko [2], A. Butenko [3], R. Umerov [4], O. Shubin [5], etc. However, less attention is paid to the use of small and medium enterprises as a factor of regional economic effect provision. The peculiarities of small and medium businesses management were studied by such scientists as A. Habiby and D. Coyle [6], W. Baumol [7], G. Eliasson and M. Henrekson [8], D. Isenberg [9], etc. However, less attention is paid to the use of such modern approaches as synergetic, project, process, etc.

A large number of articles and separate book editions are dedicated to the problems concerning the creation of a project office. With regard to regional project office special attention should be paid to I.A. Osaulenko's work where he suggests to establish a regional project management office to run regional projects portfolio [10]. At the same time such office is suggested to perform only coordinating functions, and the question of initiation of such projects and their support during implementation are not considered, that does not lead to an integrated project approach. Also, the problem of establishing regional project office work is analysed in V.M. Molokanova's work but it is focused on methods of project portfolio forming, and the functions of project office are not considered [11].

Our research is based on the following hypotheses.

Hypothesis 1: The effectiveness of crisis management of small and medium businesses depends on the level of development and usage of modern approaches (management according to "maturity models", synergetic approach, project approach, etc.) which should ensure the viability of enterprises in times of crisis.

A maturity model of strategic crisis management may contain the following levels: level 1 - a company has no experience of crisis management, there is no methodology; level 2 - a common methodology of crisis management appears; level 3 - the crisis management system completely stands out from the other systems of the enterprise; level 4 - an objective analysis of crisis management procedure is done, all criteria for assessment of the effectiveness of anti-crisis measures implementation are determined; level 5 - the existence of an effective system of enterprise crisis management. A maturity model of strategic crisis management should ensure the transition from the initial to the complete maturity level of crisis and strategic management systems (Fig. 2.1).

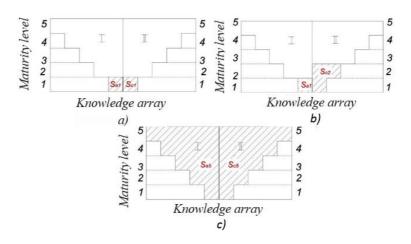


Fig. 2.1 The scheme indicating the agreement of maturity levels of crisis and strategic management systems

a) – the systems are at the primary level of maturity; b) – the systems are at different levels of maturity; c) – both systems are at the highest level of maturity; I – the crisis management system; II – strategic management system; II – an array of mastered knowledge;  $\Box$  – an array of unlearned knowledge;  $S_{ai}$  – i-level of maturity of crisis management system (i=5);  $S_{cj}$  – j-level of maturity of the strategic management system (j=5).

The total capacity of the array of mastered knowledge by means of adding together the capacities of mastered knowledge of strategic and crisis management systems can be expressed with the help of the following equation:  $S = S_{ai} + S_{cj.}$ 

A high value of mastered knowledge indicates a high level of maturity and viability of the enterprise. Method of indices calculation is mathematical modeling.

The model is reasonable to be used in the cause of small and medium enterprises of Chernihiv region management to ensure their viability, the possibility to cope with crisis or prevent it.

A synergistic approach to crisis management of enterprise is based on the fact that during the period of disbalance (crisis) fluctuations appear in enterprise management system, i.e. aberrance in operation of elements from a normal state of functioning [12]. The fluctuations can be internal (relationships between people, use of resources), or external (relations with stakeholders, subjects of region control, etc.). Aberrance of elements is determined by the change of indices characterizing their functioning. Such aberrancy can be found in different amplitudes (Fig. 2.2).

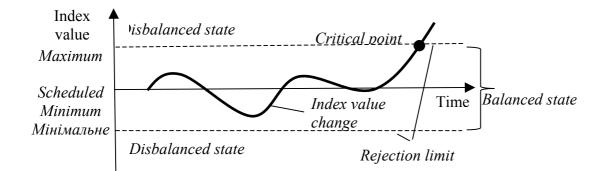


Fig. 2.2 Aberrance system element index

Fluctuations in a particular element index value generally do not ruin the balance of the system (system remains stable). If index value of the system element appears beyond a critical point, there is disbalance in the system. In this

case, if the fluctuation is beyond a critical point, bifurcation appears, when the system can qualitatively change its trajectory, i.e. to organize or ruin itself, which indicates way out of crisis for the enterprise.

Synergetic approach is reasonable to use in the cause of crisis management of small and medium enterprises of the region, as well as for the organization of cooperation between enterprises and system of the region. This will cause a synergistic effect in the form of reduced costs and additional cash receipts from businesses and provide regional economic benefit concerning regional policy.

Hypothesis 2: While managing a region in times of crisis and decentralization it is necessary to use a project approach that will make it possible to improve the system of regional management and to increase the efficiency of regional economic policy. The relevance of the hypothesis from a scientific point of view lies in the necessity to create models and methods of management of the region development and the formation of systems of professional project management, which will enhance the effectiveness of regional economic policy.

Of late years a number of measures are done in Chernihiv region to attract direct foreign investments into region economy. Representatives of various international investment funds and institutions as well as representatives of local authorities and commercial structures are invited to investment forums and roundtables. As a result the readiness to finance some viable offers in various sectors of economy was found out on the one hand and unpreparedness of our region to attract these funds on the other hand, because of almost complete lack of professional approach to the development of definite projects. Also, the experience of organizations and institutions trying to participate in grant programs on their own shows the following problems: uncertainty in their own abilities to prepare and implement projects; poor support from public authorities; insufficient information awareness about new programs of investment fund, etc.

Today there are Department of economic development and Department of investment development and capital construction in Chernihiv region, which keep records and control of projects implementation in Chernihiv region. Recently Center of State-private Partnership Utility was established on the basis of Department of investment development and capital construction; it aims at searching for investment partners for enterprises of Chernihiv region and supporting projects. Analysis of these departments' activities demonstrates nearly complete absence of professional approach to project management because of no specialists. Therefore a professional approach can only be applied through attraction of highly qualified specialists.

In order to solve these problems the establishment of a regional project management office (RPMO) is suggested (Fig. 2.3); its main aim, first of all, will be formation of project culture in region and assistance in successful development and implementation of projects in order to ensure rapid development of various economic spheres.

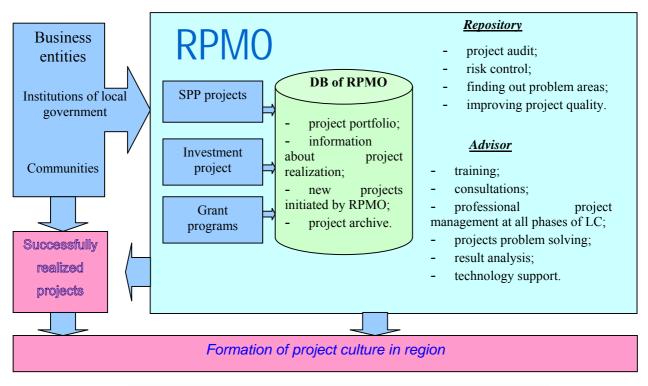


Fig. 2.3 A conceptual model of regional project office

RPMO will be given a "branded" service, which is very important today, when project approach does not exist on regional public administration level because of incompetence and underestimation of professional management effectiveness of such projects. "Brand" means the project support starting from the very beginning (when idea appears) up to the complete end and project reports arrangement, which will make customers sure to generate ideas and improve their wellbeing. Taking into consideration the innovative activity nature we suggest to form such an office on the basis of the competence approach, which is based on specialist's competencies and knowledge.

The level of project management specialists' competence is confirmed by international certificate. According to the structure shown on Fig. 3 RPMO will combine functions of offices of such types as "advisor" and "repository". In addition, the office should become "an older brother" for its customers, and they will develop a relationship of trust.

The effectiveness of this model can be assessed by the success rates of completed projects at regional level, through assessment of the level of formed project culture of the region, as well as using known indicators of economic development of the region.

The main function of the project management office should be to establish the cooperation between stakeholders of projects and maintain effective communication in order to achieve synergistic effect and open new opportunities. This function can be realised by means of modern information technology applications.

Conceptual scheme presenting project management (Fig. 2.4) includes project management office functioning. This model is based on the following five elements of project activity [13]:

- systematic approach,
- project life cycle,
- intellectual space of knowledge about project,
- project stakeholders,

- use of general management skills.

The scheme presents project management office built on the basis of the Kerzner project management maturity model [14]. This model includes different convergence layers used to connect other parts of a project; these layers make it possible to create innovative management methods and models.

Media convergence layer contains the approximation, agreement of various requirements, restrictions and possibilities concerning a project that are specified by stakeholders and environment. The systematic presentation of a project being formed by stakeholders, the core of values of all members should be defined and fixed in the form of project documentation, and innovative methods of convergence of project participants' values should be applied.

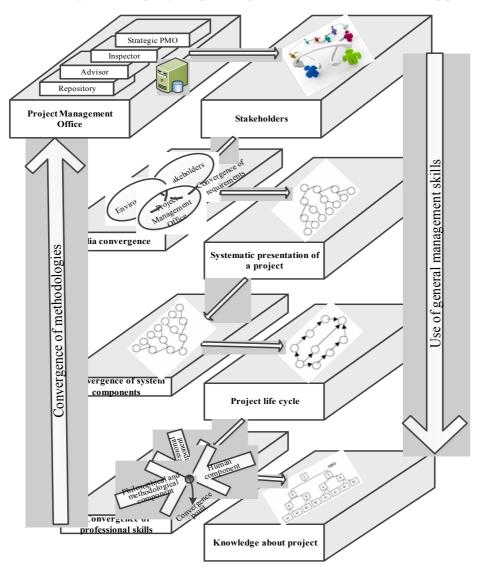


Fig. 2.4 Conceptual Scheme Presenting Project Management

Convergence of system components layer contains the integration processes of coordinated informational, organizational, logistical and administrative components of a project and a basic institution (institute of higher education). Of course, it is not desirable to integrate these systems fully, because it can make it complicated to control the main parameters of the project during its implementation. It is necessary to separate the projects of different functional subdepartments of institute of higher education, though the same resources can be used by them.

Convergence of professional skills layer combines competencies that are peculiar to various types of professional activity involved in the project. In addition, it is necessary to take into consideration the combination of professional, philosophical, methodological and human components of a modern specialist. These components are the basis for convergence of methodologies which makes it possible to introduce innovative project methods and models.

It is also necessary to take into consideration the fact that project team and stakeholders responsible for cyber security projects constitute a virtual, motivational space, in which stakeholders devote themselves to their project, being in different geographical, cultural, special and organizational environments, and cooperate sharing their points of view on the project content, planning, control and communication within that project. The quality of an intellectual space influences significantly the project execution.

In addition, cyber defence projects are carried out under the aegis of international organizations, within which misunderstandings and contradictions caused by cultural peculiarities of participants from different countries often arise. Thus, using convergence methods will help to overcome these problems and lead to understanding between project participants.

Hypothesis 3: The formation of mechanism of cooperation between small and medium businesses on the one hand and regional management system on the

other hand will increase the efficiency of realization of business strategy in times of crisis.

The relevance of the hypothesis from a scientific point of view lies in the necessity to form models and methods to determine the mechanism of cooperation between enterprises of small and medium businesses and regional management system in the process of formation of strategies of project development and management within these strategies, which will provide the effectiveness of regional economic policy. Regional system of Chernihiv region consists of a combination of economic entities, the larger part of which is small and medium businesses. A significant part of the regional economic effect is provided by revenues from enterprises activity (data are given in hypothesis 1). Therefore, the effectiveness of regional economic policy is predominantly determined by the efficiency of small and medium businesses, and influences enterprises.

In order to improve the system of cooperation between representatives of small and medium businesses and regional management system a reformation of local government and decentralization of authority are carried out in our country today. The improvement of regional economic policy in Chernihiv region can be done by means of changing budget and tax policy; planning, forecasting and programming in the region; use of natural resources and disposal of regional property, etc.

Data concerning indices value of regional economic policy (budget revenues, volume of credits, investments) and indices of small and medium enterprises for 2010-2014 will be received from Main Department of Statistics in Chernihiv region and on the basis of enterprises reporting. Data necessary for the assessment of synergistic effect of regional businesses will be received on the basis of their reporting analysis. Data analysis methods are the following: mathematical, statistical, financial analysis, software modeling. There are some other methods which can be used; among them are methods of systematic and morphological analysis, method of economic analysis for the defining economic efficiency of making such structures taking into account synergetic approach.

The model of cooperation between anti-crisis strategy of enterprises and strategy of regional development. Management system for managing region consists of management systems for managing economic entities, the strategy for managing region influences the strategy for managing enterprises. On the other hand, the results of economic activity of enterprises determine gross regional product volume, the competitive ability of the region and regional effect in general (Fig. 2.5).

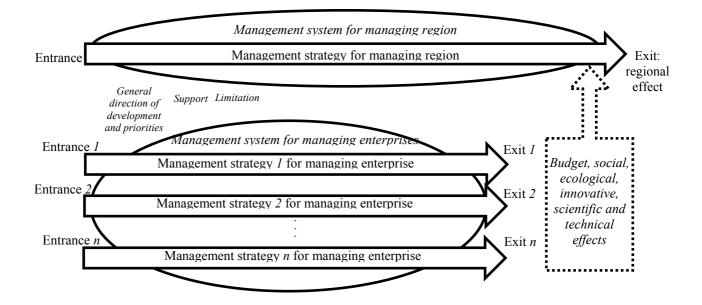


Fig. 2.5 The correlation between the strategy for managing region and the strategy for managing enterprises

As can be seen in the figure, the system for managing region functions according to a certain strategy, determining the general direction of development, normative administrative, financial, investment, resource, information and infrastructural kinds of support and appropriate limits for n enterprises (where n is a number of enterprises in the region).

The effectiveness of anti-crisis strategy implementation (at the completion of the investment project) (E) can be calculated on the basis of effectiveness

coefficient with the following formula:  $E = K_p \cdot K_a \cdot K_c$ , where Kp is a coefficient indicating use of money:  $K_p = \Gamma / \Phi = \Gamma / \left( \sum_{i=1}^n P_i \cdot B_i \pm \sum_{i=1}^n \mathcal{A}_i \cdot B_i \right)$ ,

where  $\Gamma$  is a budget cost of the project;  $\Phi$  is a sum of spent money;  $P_i$ ,  $B_i$  are planned quantity and cost of i-th resource;  $\mathcal{I}_i$  is an amount of saving/over expenditure of i-th resource; n is a number of types of resource;  $K_R$  is a quality

coefficient: 
$$K_{g} = K_{gp} \cdot K_{gn} = \sum_{j=1}^{m} \prod_{j\phi} / \prod_{jn} \cdot w_j \cdot \sum_{g=1}^{k} \prod_{g\phi} / \prod_{gn} \cdot w_g$$
,

where  $K_{np}$  is a quality of s work;  $K_{nn}$  is a quality of a product;  $\Pi_{j\phi}$ ,  $\Pi_{jn}$  and  $w_j$  are actual, planned value and unit weight of the j-th parameter of works;  $\Pi_{g\phi}$ ,  $\Pi_{gn}$  and  $w_g$  are actual, planned value and unit weight of g-th parameter of a product; m, k are a number of parameters of work or products respectively; Kc is a coefficient of synergetic effect:

$$K_{c} = K_{ci} \cdot K_{cu} = \frac{B_{pn}}{B_{p\phi}} \cdot \frac{t_{n}}{t_{\phi}} = \frac{\sum_{i=1}^{n} P_{i} \cdot B_{i}}{\sum_{i=1}^{n} P_{i} \cdot B_{i} - \sum_{i=1}^{n} \Pi_{ci} \cdot B_{i} + \Delta I_{\partial o \partial}} \cdot \frac{t_{n}}{t_{n} - \Delta t_{p} - \Delta t_{m} - \Delta t_{o}}$$

where  $K_{ci}$ ,  $K_{cu}$  are coefficients of the effect as a result of changing investment requirements and time;  $B_{pn}$ ,  $B_{p\phi}$  are planned and actual cost of a resource;  $t_n$ ,  $t_{\phi}$  are planned and actual time;  $\Pi_{ci}$  is a number of resources transferred from an enterprise;  $\Delta I_{\partial o \partial}$  is additional investments;  $\Delta t_p$ ,  $\Delta t_m$ ,  $\Delta t_o$  are time saving for a project fulfillment, placement of contracts, etc. If  $E \ge 1$ , then introduction of anti-crisis strategy is an effective approach.

The assessment of regional effect will be carried out on the basis of economic analysis of the reporting indices. The model should be used in the formation of programs concerning support of business, development strategy of the region.

On the basis of actual performance of the enterprises with the help of the calculations done by means of special or standard software tools it is possible to make appropriate predictive models concerning usage of production potential. Taking into consideration these models as well as analyzing the appropriate

stored database information, it is possible to make proper and timely changes in the process of projects realization by appropriate manufacturers. A maturity model of strategic crisis management will make it possible to receive economic effect at enterprises, to maintain the viability that will provide regional economic benefit concerning regional economic policy. A synergistic approach to crisis management of enterprise is reasonable to use in the cause of crisis management of small and medium enterprises of the region, as well as for the organization of cooperation between enterprises and system of the region.

Conceptual model of regional project office will make it possible to develop and run ideas concerning the development of the region in the form of projects through the project office, to justify the further development and implementation of RPMO.

The model of cooperation between anti-crisis strategy of enterprises and strategy of regional development will make it possible to assess the synergistic effect while realization of anti-crisis projects, as well as the effect of cooperation between the enterprises and the region. This will provide the regional economic effect concerning regional economic policy.

Thus, the proposed models are focused on providing opportunities for small and medium businesses to find out the ways out of crisis or to prevent crisis, to ensure their viability that will provide regional economic effect within the realization of regional economic policy.

## References

- [1] Mantsurov, I., Vaschayev, S., Dryga, S. et al. (2009). Development of small enterprises (Statistical evaluating of the impact on economic growth and the competitiveness of the country). Kyiv: Kyiv National Economic University (in Ukr.).
- [2] Berezyanko, T. V. (2012). Actual directions of state support of small businesses in the crisis. Investment: Practice and Experience, 10, 34-36 (in Ukr.).
- [3] Butenko, A. (2012). State support of entrepreneurial sector of Ukraine: experience and problems. Economics of Ukraine, 5, 41-51 (in Ukr.).
- [4] Umerov, R. E. (2012). Features of development of small business in Ukraine. Actual Problems of Economics, 10(136), 64-67 (in Ukr.).
- [5] Shubin, O. O. (2012). The concept and motivation for a mechanism of sustainable development usage in small businesses. Trade and Market of Ukraine, 33, 3-7 (in Ukr.).

- [6] Habiby, A. S. (2011). Les entrepreneurs du XXI-e siecle: Un changement qualitative. Problems of Economy, 3026, 28-34 (in French).
- [7] Baumol, W. J. (2004). Entrepreneurial enterprises, large established firms and other components of the free-market growth machine. Small Business Economics, 23(1), 9-24.
- [8] Eliasson, G., Henrekson, M., & Baumol, W. J. (2004). An entrepreneurial economist on the economics of entrepreneurship. Small Business Economics, 23(1), 1-7.
- [9] Isenberg, D. J. (2010). How to start an entrepreneurial revolution. Harvard Business Revue, 88(6), 41-50.
- [10] Osaulenko I.A. Upravlinnia zminamy portfelia rehionalnyh proektiv //Upravlinnia rozvytkom skladnyh system, 2014 No. 17. pp. 46-51
- [11] Aksionova H.D. Naukovi zasady formuvannia modeli vzaiemodii orhaniv mistsevoho samovriaduvannia z pidpryiemnytskymy strukturamy u rozviazanni ekolohichnyh problem /Ekonomika ta derzhava, 2011. No. 2. pp. 134 137.
- [12] Osnovy synerhetyky / V.I. Suhakov K.: Oberehy, 2001. 287 p.
- [13] Neizvestnyy S.I. (2005). Project Management: a tutorial, IT, 221. (in Rus.).
- [14] Kerzner H. (2003). Strategic planning for project management using a maturity model. Publisher: DMK Press, IT Co., 320. (in Rus.).

#### 2.2 Government control of local innovative centers

The main distinguishing feature of modern structural transformations of economy is a transition to postindustrial society. For this period characteristic mastering and distribution of the sixth technological mode, that in the second half of 20<sup>th</sup> of century radically changed not only character of production but also structure of society.

The important feature of this process is that he takes place in the conditions of globalization, forming of single (but differentiated) global scientifically-technological, socio-economic and ecological space at gradual is displaced to the spotlight in the acceptance of radical technological and economic decisions from national on a global, under governmental level.

In accordance with existent practice the important stage on a way to an innovative economy is development of national strategy of innovative development. Such strategies envisage confession at governmental level of innovations the vital factor of the economy growing, creation of new organizational structures, that take into account system character of innovations, use of new mechanism of prognostication and determination of priorities, passing to new strategy of stimulation of innovations, expansion of horizontal and vertical co-ordination of innovative politics, strengthening of her regional level and others like that.

Introduction of national strategy of innovative development of economy envisages the wide circle of measures: public policy of support of scientific researches, determination and support of priority directions and institutes and others like that. One of inalienable constituents of this process support of local formations that would unite the different institutes involved at all stages of innovative process geographically comes forward local innovative centers.

To our opinion, national strategy of innovative development is the concerted totality of administrative decisions that influence on innovative activity of country and have long-term consequences.

In accordance with existent practice development of strategy of innovative development of country envisages previous authentication of the state as the economically motivated social organization that has a certain goal of development. It is envisaged also, that on all levels of stimulation of innovative development to the major tasks there is forming and adjusting of process of the optimal use of resources on a way to the achievement of the put aims. Thus decision space can be divided into three categories: strategic, administrative and operative [1].

Strategic decisions must be related rather to external, than with the internal problems of country foremost with positioning of itself in the world market of distribution of commodities and services. The problem of self-appraisal of the state and search of new directions of the development swims out from here. Thus strategic decisions must determine further administrative (administrative) and operative decisions.

Administrative (or administrative) decisions are related to structurization of resources of territories and industries, with the aim of not only optimization of their use but also with the decision of general tasks of strategy. Certain part of these decisions relates to conditioning of functioning of branch and geographical markets of commodities and services, that does possible certain organization of material, power and informative streams in the national productivetechnological system.

The primary purpose of operative decisions is optimization of operations in relation to maximization of income, in particular by allocation of resources in functional industries and nomenclature of producible products. As key decisions here come forward question of pricing, marketing strategy, providing of necessary levels of supplies and loading of powers, accumulation and selection of facilities on research and technological development.

Concordance all requires three levels of decisions permanent monitoring of the real parameters and innovative performance indicators, and also mechanism of correction of strategic decisions to begin track with the level of

forming of decisions of top (strategic) level. Modern scientists distinguish the types of strategies of innovative development, described in a table 2.1.

Table 2.1

Type of strategy	Essence of strategy of innovative development	Countries strategy will be realized in that
Strategy of "transference", or strategy of "inheritance"	Use of present foreign scientific and technical potential through the purchase of licenses to high- efficiency technologies for mastering of producing of competitive products that is already produced in the developed countries.	Japan in a post- war period
Strategy of "borrowing", or strategy of leader technologies	Use of own cheap labour force and scientific and technical potential, mastering of production of goods, that came true before in more developed countries, and gradual increase of the own technical providing of production.	South Korea, China and row of countries of South-east Asia
Strategy of "increase", or innovative-breach strategy	Use of own scientific and technical potential, creation fundamentally of new types of products, that pass ahead modern standards on a one or two generation, achievement of integration of fundamental and applied science.	The USA, countries of Western Europe

Strategies of innovative development of country

On the basis of walkthrough of going near classification of strategies of innovative development certainly, that as classification signs can be distinguished: role of the state and private to the sector of economy in relation to initiation of innovations, scales of scope, correlation of fundamental and applied researches and developments, innovative processes, type of the economy growing, type of innovations that is inculcated with the aim of providing of innovative development of economy.

The aim of strategy of innovative development of leading countries of the world is an assistance to development of scitech, increase of innovative activity that provides the competitiveness of national products in the world market, defensive capacity of country, improves an ecological situation, and also assists to development of venture long-term business. Coming from this aim, the state determines priority directions of development of innovative activity and elects the basic ways of support of organizations that work on implementation of the government innovative programs.

Strategy of innovative way of development of the state can not be attained without creation of favourable economic terms for high technology enterprises. A primary purpose is an assistance to midsize and small business, providing production new technologies and hi-tech productions of local innovative centers. At the same time success of development of local innovative centers depends on correctly select strategy of public policy. The aim of state support consists in work of effective mechanism that will provide maximal effectiveness of local innovative centers and will assist to development of innovative sphere of national economy.

For the increase of innovativeness of economy of Ukraine in a period 2007-2009 within the framework of the state strategic planning the different subjects of national economy were the worked out projects of strategies of innovative development countries on a long-term prospect, comparative description of that in part of ground of role of local innovative centres is driven to table 2.2.

Considerable attention is spared in the projects of Ukrainian strategies of innovative development to the local innovative centers, concrete suggestions of measures and mechanisms are however absent in relation to an assistance to development and forming of new local scientifically-technological formations. The general lines of public policy and possible scenarios of development of the innovative system of Ukraine that will become the result of the quality forming of innovative infrastructure are only outlined in these documents. It predetermines the necessity of development of national strategy of development of LIC, sent to creation of new type of innovative infrastructure able to provide the competitiveness of local technological parkes and business-incubators on the basis of the use of home scientifically-technological potential, to assist the quality economy growing.

It was certain that national strategy of development of local innovative centers is the system of aims, principles, tasks and methods of influence, sent to development and realization of effective organizationally-economic mechanism of development of local innovative centers as one of the main factors of development of national economy.

Table 2.2

# Projects of strategies of economic development are in the context of providing of innovative development of Ukraine and role of LIC

Name of strategy	Developer, year	Essence	A place of LIC in strategy
National strategy of development "Ukraine - 2015"	A Public- political association "Ukrainian forum", (2007)	Scientifically-technological and innovative politics is examined as one of instruments of providing of economic development on condition of forming of effective state innovative strategy.	Creation of LIC is examined as one of foreground jobs on a way to innovative development of Ukraine.
Strategy of economic development of Ukraine 2020 to: strategy of national modernisation	Ministry of Economy of Ukraine, (2009)	The innovative system is examined as separate part of economy, development of that will provide claim of innovative model of development.	Creation and development of LIC are important direction of increase of competitiveness of national economy and forming of the national innovative system.
Strategy of innovative development of Ukraine on 2009- 2018 and on a period 2039	State agency of Ukraine of investments and development, (2009)	An innovative sphere is an interdisciplinary sphere that cares of complete life cycle of competitive commodity and touches all spheres of human existence and activity. Main priority of development is a creative man.	Наглошується on strengthening of state support of LIC as basic objects of innovative infrastructure.
Strategy of innovative development of Ukraine is on 2010-2020 in the conditions of challenges of globalization	Committee on questions science and formation of Verkhovna Rada of Ukraine, (2009)	Realizable estimation the iнновативностi economies, outlined basic challenges that form long-term external and internal pre-conditions of perspective development of economy, certainly directions, mechanisms and concrete measures in relation to practical introduction of strategy.	It is marked on strengthening of state support of LIC as basic objects of innovative infrastructure.

Strategy on the essence must take into account the challenges of globalization, to that belong: necessity of providing of steady development of country, pressure of the new technological modes on the productive system, influence of demographic changes in the structure of population. This strategy has leans against complex approach, to create all necessary terms for development of local innovative centers (legal, economic, institutional, political and others like that), and that is why her forming is directly related to innovative politics and government control of local innovative centers.

As in Ukraine local innovative centers are presented by two basic types are технопарки and business-incubators - expedient is an analysis of foreign experience in relation to their state support, and also comparison of the obtained data with Ukrainian realities. Today more than two thousand technology parks and business-incubators function in a world economy. The their most is concentrated in the USA, People's Republic of China, Russian Federation, Great Britain, Germany and others. Analysing the system of state support of development of local innovative centers of foreign countries, the basic factors of success were distinguished (table 2.3).

Thus, it is possible to mark the most effective measures of state support of local innovative centers of the world countries:

- development of national strategy of development of local innovative centers, that is based on the взаємоузгоджених government programs;
- creations of the system of legislative and normatively-legal acts that regulate activity of LIC,
- developments of the effective system of co-operation of research and productive potentials are on the basis of state contracts,
- providing close to the interrelationship of LIC with universities and research institutes, by a production and financial and credit establishments through the mechanisms of the general financing and state-private partnership,

### Factors of success of state support of local innovative centers foreign

#### countries

Name of the state	Factors of success of state support of LIC
United States of America	Close connection of LIC with universities and state research centers on the basis of the special government programs; tax deductions, transparent regulator mechanisms; the ramified system of public and local organs is from initiation of creation of local innovative centers; row of the governmental programs, sent to co-operation of education, science, production and state, based on principles of state partnership; market mechanisms; the system tying up of aims of the national programs is in relation to development of key technologies from the decision of tasks of financing of research; three basic mechanisms of the budgetary financing of research works : underbacks, contracts and agreements about a collaboration; participating of LIC is
China	in a global competition, as a state financing is given only on the initial stage. The concerted planning and state program development is from support of LIC; tax deductions are for a term of 5-7; "favourable vacations" are for national enterprises on 1, and for joint ventures - on 2.
Russian Federation	Sponsorship of by federal, local and regional budgets; assistance of power to технопаркам in creation of own material and technical base, in financing of preparation of specialists, in support of innovative projects of small enterprises that is included in технопарки; mechanisms of state-private partnership are at creation of LIC; having a special purpose selection of budgetary facilities of наукоградам; grant of наукоградам in property or in the management of objects that are in federal property; a grant to the organ of local self-government of наукограда of separate state plenary powers is with the simultaneous transmission of material and financial resources; forming of scientific and technical and socio-economic growth of science cities fund.
Germany	Integration processes, aimed at perfection and reformation of the systems of development of innovative structures, assistance to commercialization in a scientific sphere; eight different state agencies of earth of Gessen formed the special incorporated organ, main in activity of that support of innovations must become in small and midsize businesses at regional level.
Japan	Fixing is at legislative level of conception of creation of технополісів; long-term program development from creation in the small cities of country 26 zones of the newest technologies, the aim of activity of that is an exit of economy on the duty stage of technological presentation, and also stimulation of socio-economic development of peripheral prefectures; state support of local combination of education, science and production; almost 50% budgetary charges are on financing of LIC; creation of center of integration of industry, universities and government.
France	Co-ordination of efforts of federal and regional governments is from an assistance to development of LIC; hard ecological requirements, that is pulled out to the businessmen that decided to place subdividing into territory of LIC; assistance to the collaboration of research institutes and LIC; grant of infrastructure to the graduating students of post graduate course, that create private enterprises, executing the functions of business-incubator.
Finland	State support of combination of education, science, production and financial sector; a grant of безоплатних subsidies, underbacks is under experience projects on competitive basis; participating of LIC is in a global competition; absence of any privileges is for those, who creates and enters innovative developments; absence of tax deductions.

- the budgetary financing of activity of LIC is through the system of tax deductions, underbacks, contracts and agreements about a collaboration, but partial - for creation of competition and terms of stimulation of development,
- assistance to forming of scientific potential is in universities, help to the students, graduate students in realization of innovative projects,
- application of market mechanisms is in combination with transparent politics of government.

As illustrates experience of the considered states, LIC serve not only for stimulation directly of scientifically-research activity but also by the means of commercialization of her results, for this reason development of local innovative centers must be base on principles of the system and integrity, id est for the valuable and effective functioning identically necessary are absolutely all links. Exactly with the aim of providing of such complex development of LIC important is making of only integral strategy and active voice at her realization of both business representatives and public organs of power, in particular on regional and local levels.

The state must be an organizer and participant of the active innovative converting into the economy of country through the mechanisms of adjusting and management local innovative centers. It requires legislative efforts not only at the level of realization of innovative politics of the state through an acceptance and implementation of the having a special purpose economic and scientific and technical programs, and also and at the level of creation of legal soil for international cooperation, forming of corresponding organizational mechanisms.

The optimal variant of development of innovative environment is adjusting of close contact between the state (directly interested in the increase of innovations that promote socio-economic prosperity of citizens), education (in the person of higher educational establishments that come forward as a source of innovative ideas) and business (able to carry out financing of innovative developments). Possibility to carry out an afore-named task gives creation to the network of local innovative centers due to the association of capital and scientific and technical potential [19].

The strategic task of the state consists in the concentration of financial and intellectual capital on new priority directions, creation of large competitive technology parks and financially-industrial corporations – national economic leaders able to perform the duty of indicators of development. For activation of innovative activity of only market mechanisms on the modern stage of development of Ukraine, as experience of the developed countries testifies with the protracted history, the purposeful regulative functions of the state are needed in a scientific and technical sphere.

As government control of local innovative centers is component part of general mechanism of government control of national economy on the whole, then necessary is authentication of essence and economic filling of government control of national economy. Problem of the complex finding out of essence of adjusting of economy, forms and methods of government control, him basic models in the process of evolution of the economic system is one of basic at finding out optimal ways of her development. The kernel of economic mechanism on the modern stage is government control of economy. As an economic system is formed from a few subsystems, many elements and greater amount of components, and each of such subsystems and them structural elements is different after the essence, the methods of government control substantially differ.

Government control of national economy is purposeful and active influence of public and state organs of management on functioning and development of the integral economic system by the use of economic laws and decision of economic contradictions by means of certain totality of forms and methods [20].

Regulative activity of the state just envisages adjusting of economic and social relations with the aim of realization of certain goals (Figure 2.6). Basic

from them (that also logically formulated from the given determination) is providing of development of national economy that is also the result of activity of local innovative centers, as be marked in a previous paragraph.

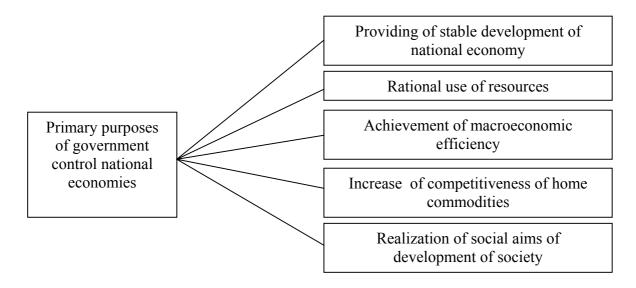


Fig. 2.6 Primary purposes of government control of national economy

Coming from the brought description over of government control of national economy and features of influence on her of local innovative centers, under government control of local innovative centers it costs to understand totality of methods of direct and indirect influence of the state on development of local innovative centers with the use of instruments of the legislative, administrative and economic adjusting for providing of them effective functioning and development. To the specific aims of government control of local innovative centers it follows to take:

- providing of activity of local innovative centers,
- balancing of state and private interests,
- avouching for of necessary level of quality of projects of local innovative centers, their accordance the actual necessities of national economy.

A purposeful public policy in relation to creation of the proper terms for development of innovative centers assists the increase of competitiveness of home productions. Local innovative centers – technopolises, technology parks, business-incubators, and also informative systems, backing of innovations funds are created with active state support, in particular, venture, developed system of preparation and in-plant training of specialists in industry of management – allow to extend the scales of innovative processes, bringing over new participants to them [25]. Thus, development of local innovative centers is provided by the state by the improvement of mechanism of the state financing, search of flexible methods of management on the basis of state-private partnership, grant in the use of lot lands on the favourable terms, strengthening of intercommunication between the subjects of innovative activity.

Government control of local innovative centers comes true by means of methods and instruments the use of which result in the receipt of desirable results.

On a form influence on local innovative centers the methods of government control can be divided into the methods of direct and indirect influence. The methods of direct government control will be realized by means of instruments of public authorities. The chart of government control of local innovative centers is presented on Figure 2.7.

A major role government control of economy is played by economic methods that carry out as direct, so, and the mediated influence on functioning local innovative centers. Administrative - are the methods of direct action, that provide realization of economic methods, creating for this purpose necessary terms through the system of normatively-legal acts that are the instruments of legal methods.

Legal frameworks of adjusting of local innovative centers in Ukraine are made by the system of legislative acts. In 1991 first in the CIS was passed an act "About bases of public policy in the field of science and scientific and technical activity", that afterwards, in 1998, was transferable to Law of Ukraine "On scientific and scientific and technical activity" [26]. On initiative Ministry of science and technologies there was the prepared order of President of Ukraine

№ of 17/96-pπ, that supported initiative in relation to creation and functioning in Ukraine of technology parks and innovative structures of other types [27].

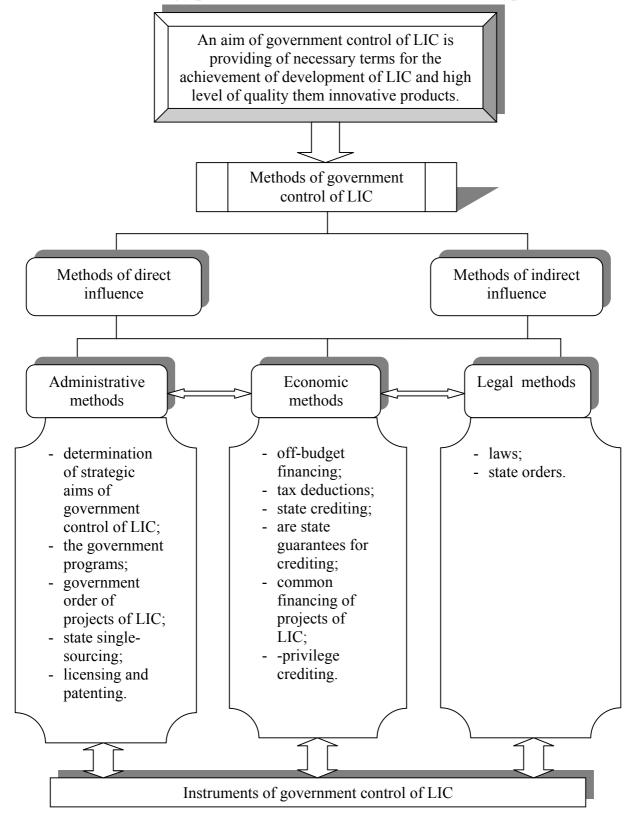


Fig. 2.7 Chart of government control of local innovative centers

On the basis of this order it was ratified by Cabinet of Ministers of Ukraine of "Statute about the order of creation and functioning of technology parks and innovative structures of other types", that determines the general order of creation and functioning of technology parks and innovative structures of other types, them legal status, bases of mutual relations of participants of these structures [28]. In 1999 was passed an act "About the dedicaded mode of investment and innovative activity of technology parks", according to that sixteen technology parks operate by the state on January, 1, 2014 [29].

On the modern stage a considerable step forward establishment of national project became "Technopolis is creation of infrastructure of innovative development and high-tech". Resolution of Cabinet of Ministers of Ukraine is "Some questions of preparation to realization of national project "Technopolis" is creation of infrastructure of innovative development and high-tech and his constituents" from 31.10.2011 №1014 [30] defined that a project envisaged creation of infrastructural complexes of innovative development with certain specializations in industry of high-tech. A project is creation of five infrastructural complexes of innovative development "Technololis" in five centres of Ukraine (Kyiv, Kharkiv, Lviv, Dnipropetrovsk). Realization of national project "Technololis" comes true due to money of private investors or state enterprises that belong to the sphere of management of the State agency from investments and management national projects.

However, it should be noted that absence of the formed approach of the systems, scientifically reasonable conceptual principles and only structured "tree of aims" of public scientifically-technological and innovative policy is not compensated by the increase of amount of legislative and normatively-legal acts, numerous changes and adding to them. Both world and home experience is testified, that than legal norms change more often, that they are executed less effectively. A Normatively-legal base of adjusting of activity of local innovative centers is contradictory enough, in addition, in full answers principles of

economy that is base on knowledge. Effective legal framework of functioning of venture capital is absent for today as a market institute, and procedures of creation of separate subjects of innovative activity are groundlessly complicated. Imperfection of legal base of adjusting of activity of technological parks and other innovative formations strengthens the practical worker of halt of the separate articles of laws in force legislative acts. The possible way of overcoming of the marked problems development of Pandect will become about scientific, scientifically-technological and innovative activity that will allow to create the integral legal system of adjusting of the marked spheres of activity.

In world practice the most widespread economic instruments of government control of activity of innovative centers are such [31, c. 239]: extension of research and investment tax credit; reduction to the tax is on the increase of innovative charges; "tax vacations" are during a few years of work on the income got from realization of innovative projects; decline of rates of the income tax sent to realization of research and designer works; favourable tax treatment of the income, got as a result of the use of patents, licenses, nowhow and other assets that enter in the complement of intellectual property; reduction of taxable income is to the amount of costs of devices and equipments, that is passed to higher educational establishments, research institutes and other innovative organizations; deduction is from the taxable income of payments in benevolent funds, activity of that is related to financing of innovations; put of share of profits of innovative organization on the special accounts with next favourable tax treatment as the use on innovative aims; there is free delivery of licenses to the commercial use of the inventions, patented during budgetary researches and such that are property of federal budget; other privileges and financial stimulators.

To the local innovative centers of Ukraine for implementation by them innovative projects a legislation is envisage state economic support by a way: complete or partial interest-free crediting due to money of the state budget of Ukraine and money of local budgets of projects of technology parks, industrial parks, technopolises and small innovative enterprises in composition businessincubators; complete or partial indemnification (due to money of the state budget of Ukraine and money of local budgets) of percents, that is paid by Technopolis, technology parks and business-incubators to the commercial banks and other finansial establishments for crediting of innovative projects; grant of state guarantees to the commercial banks that credit creation of technopolises; indemnifications of charges are on development of co-operation between small and middle innovative business entities and large enterprises; government order on delivery by the scientific parkas of products, implementation of works and grant of services; state single-sourcing on irretrievable basis for arrangement of industrial parks; release from the inpayment of import duty on a scientific, laboratory and research equipment for technological parks and scientific parks.

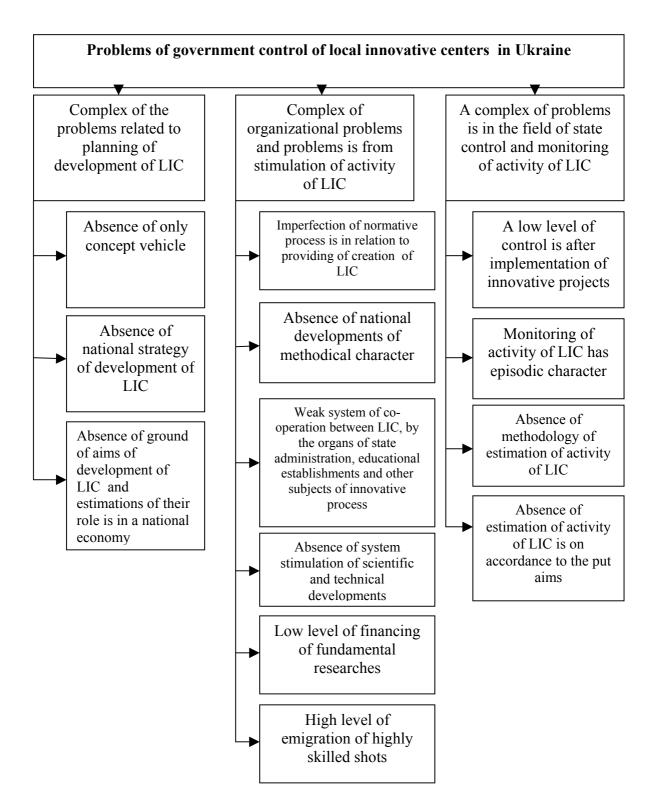
It should be noted that through contradiction and inconstancy of normatively-legal base of government control of innovative activity in Ukraine some economic instruments of influence on activity of local innovative centers exist only formally and does not operate, or their action is anniented. Yes, by Law of Ukraine "On making alteration in Law of Ukraine "On the state budget of Ukraine on 2005" and some other legislative acts of Ukraine" from 25.03.2005 practically there were anniented privileges for the home special (free) economic zones and technological parks [32]. From February, 2006 renewal of favourable tax treatment took place to technology parks by law Ukraine №3333 - IV from 12.01.2006, according to that sponsorship of projects of technological parks was envisaged through the input of the budgetary program of support of activity of technological parks [33]. The realizable release of this Law substantially differs from previous that did not change this Law so fundamentally. In the release of Law "On the dedicaded mode of innovative activity of technology parks" from January, 12, 2006 tax deductions on a valueadded are already absent [33], in him privileges are certain as subsidies.

Thus, from Law [33] a basic important privilege - privilege is withdrawn on a tax value-added due to that basic development of technological parks came true and basic developments of projects were executed. A privilege on an import duty is not substantial, and the privilege of sum of the income tax got during realization of projects of technological parks envisages producing and realization of innovative products already. Another difference is that the dedicaded mode gets to not activity of technology parks and to their workers, but certain innovative projects, and realization of project can not be founding for the decline of tax obligations after the basic type of activity of performer of технопарку. The favourable terms of taxation within the framework of the dedicaded mode have the special value self for Ukrainian technology parks, because they have practically absent the direct state financing. From these privileges most ponderable was a privilege from VAT, that in the last release of base Law was anniented.

The analysis of existent methods and instruments of government control of local innovative centers in Ukraine allows to enduce main modern problems of government control of such structures (Figure 2.8) the decision of that must provide effective development of local innovative centers in the future.

The conducted analysis of the system of government control of local innovative centers proved in Ukraine, that measures accepted in the field of given did not have system character. There is a necessity of strengthening of support of development of local innovative centers from the side of the state, that conditioned by their meaningfulness for the economy of Ukraine in the period of market transformations.

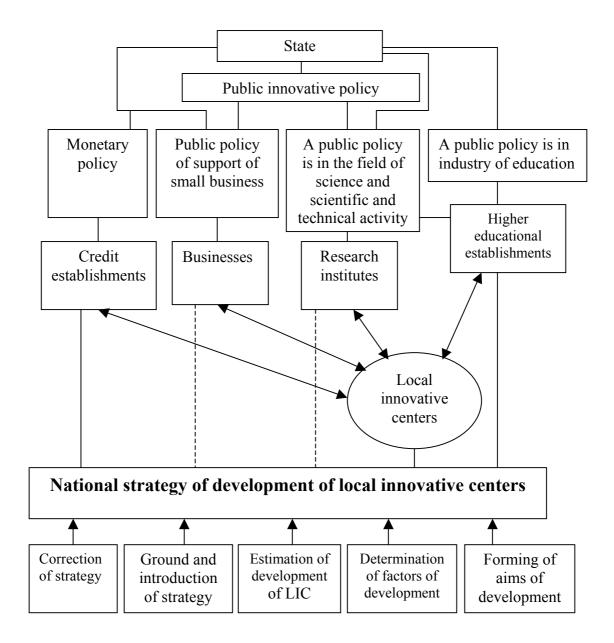
By the primary objective of government control of local innovative centers making of effective mechanism must become in Ukraine, to provide their maximal effectiveness and assist to development of innovative sphere of national economy. By effective means national strategy of development of local innovative centers will combine the complex compatible going near the legal, economic and administrative methods of government control of local innovative centers and individual going near the terms of development of different types of these structures, can become for the achievement of this aim.





#### in Ukraine

Such combination is possible at application of not only measures of innovative politics of the state but also monetary policy, public policy of support of small business, public policy in the field of education, science and scientific and technical activity, as development and functioning of local innovative centers possible at terms co-operations of the state, scientific cells, higher educational establishments, productive enterprises and financial establishments. The conceptual chart of government control of development of local innovative centers in the system of national strategy is represented on Figure 2. 9.



## Fig. 2.9 A conceptual chart of government control of development of local innovative centers in the system of national strategy

A public innovative policy is a complex of legal, organizationallyeconomic and other measures of the state, proper terms for development of innovative processes in an economy, stimulation of introduction of results of innovative activity sent to creation in a production, exactly a public innovative policy determines basic priorities, directions and principles of innovative development of country. According to the current legislation of Ukraine to basic principles of public innovative policy providing of co-operation of science, education, production, financial sphere behave at development of innovative activity and assistance to development of innovative infrastructure. Exactly these principles can be realized through national strategy of development of local innovative centers.

Influence of monetary policy on development of local innovative centers shows up in stimulation of creation of the specialized innovative banks, and also funds of the long-term crediting of functioning commercial banks by establishment of corresponding privileges from taxation of money that is invested for the achievement of technological changes; to differentiation of rate of income tax commercial banks, depending on directions of the use of resources, by a decline – in case of their long-term crediting of hi-tech projects, and increase – in case of insetting of money in the highly profitable operations of financial market; creation of the system of the favourable refunding of commercial banks that give favourable credits for realization of projects of local innovative centers; input of the state system of insurance of risks of innovative activity due to the specially created insurance company and others like that.

As local are the structures of creation of small innovative enterprises, the public policy of support of small business directly influences on terms them effective functioning. In particular, basic directions of public policy in the field of development of small and middle enterprise in Ukraine are bringing in of small business entities to implementation of the scientific and technical and socio-economic programs, realization of supply of products (works, services) for

state and regional necessities; providing of state sponsorship of small and middle enterprises by the input of the government programs of crediting, grant of guarantees for the receipt of credits, partial indemnification of interest rates on credits and others like that; assistance to development of infrastructure of support of small and middle enterprise, namely: tekhnoparks, tekhnopolises and business-incubators.

A public policy in the field of science and scientific and technical activity envisages socio-economic, organizational, legal terms for forming and effective use of scientific and technical potential, including state support of local innovative centers as subjects of scientific and scientific and technical activity; creation of the system of the informative providing of scientific and scientific and technical activity, integration of education, science and production.

A public policy in industry of education will assist to development of local innovative centers in part of training of highly skilled personnels scientifically and scientific and technical activity for development and realization of innovations, and also preparation of professional managers for effective organization of functioning of local innovative centers.

Dynamic innovative development and economy growing on the basis of strategy of development of local innovative centers must come true on a background perfection of state administration in scientific and technical, innovative, educational and financial industries. For the achievement of substantial positive changes in this direction necessary forming of only strategy of development of local innovative centers, that provides for: perfection institutional bases of public scientific and technical and innovative policy; overcoming of disconnected and apartness of educational, scientific establishments and production; to provide creation of only technological and informative infrastructure for science and innovative enterprise in Ukraine as a network of local innovative centers; creation of institutional basis of market stimulation of innovative development; perfection of the system of the state financing of innovative processes, mechanisms of government order is in a

scientific and technical sphere, and also monitoring of efficiency of financing and realization of scientific and innovative projects.

Thus, it is possible to come to the conclusion, that government control of local innovative centers is the system of methods of direct and indirect influence of the state on development of local innovative centers with the use of instruments of the legislative, administrative and economic adjusting for providing of them effective functioning and development. The main problems of government control of local innovative centers in Ukraine are dispersed and contradiction of normatively-legal acts, stop of action of economic stimuli of influence and absence of the complex going near adjusting of activity of these structures. The effective means of decision of these problems forming of only national strategy of development of local innovative centers, that will allow to connect government control in the areas of science, education, production and money-and-credit system in the only organizationally-economic mechanism of development of national economy by an innovative way, will become.

#### References

- [1] Ансофф И. Новая корпоративная стратегия / И. Ансофф. СПб.: Питер, 1999. 414 с.
- [2] Антонюк Л.Л. Інновації: теорія, механізм розробки та комерціалізації: монографія / Л.Л. Антонюк. К. : КНЕУ, 2003. 394 с.
- [3] Горбатенко В.П. Інноваційний розвиток економіки: політико-правові аспекти: монографія / В.П. Горбатенко. – К.: ТОВ «Видавництво «Юридична думка», 2006. – 248 с.
- [4] Державне управління регіональним розвитком України: [монографія / за заг. ред. В. Є. Воротіна, Я. А. Жаліла]. К.: НІСД, 2010. 288 с.
- [5] Інноваційна стратегія українських реформ / А.С. Гальчинський, В.М. Геєць, А.К. Кінах, В.П. Семиноженко. К.: Знання України, 2002. 336 с.
- [6] Куценко Т. М. Теоретичні основи формування стратегії інноваційного розвитку в контексті інтенсифікації інноваційних процесів / Т. М. Куценко // Маркетинг і менеджмент інновацій. 2012. № 4. С.308-317.
- [7] Онишко С.В. Фінансове забезпечення інноваційного розвитку: монографія / С.В. Онишко. Ірпінь: Національна академія ДПС України, 2004. 434 с.
- [8] Про Стратегію економічного та соціального розвитку України «Шляхом європейської інтеграції» на 2004-2015 роки: Указ від 28.04.2004 №493/2004 [Електронний ресурс] / Президент України. – Режим доступу: http://zakon.rada.gov.ua.
- [9] Україна-2015: НАЦІОНАЛЬНА СТРАТЕГІЯ РОЗВИТКУ / [В. М. Геєць, В. П. Семиноженко, Б. Є. Кваснюк]. Київ, 2007. 74 с.

- [10] Стратегія економічного розвитку України до 2020 року: стратегія національної модернізації. [Електронний ресурс] / Міністерство економіки України. Режим доступу: http://me.kmu.gov.ua/.
- [11] Стратегія інноваційного розвитку України на 2009-2018 роки та на період до 2039 року. [Електронний ресурс] / Державне агентство України з інвестицій та розвитку. Режим доступу: http://www.in.gov.ua/.
- [12] Стратегія інноваційного розвитку України на 2010–2020 роки в умовах глобалізаційних викликів / Авт. упоряд.: Г. О. Андрощук, І. Б. Жиляєв, Б.Г. Чижевський, М.М. Шевченко.— К: Парламентське вид-во, 2009. 632 с.
- [13] 13. Андрощук Г.О. Програма інноваційного розвитку економіки Німеччини: Стратегія високих технологій / Верховна Рада України, Комітет з питань науки і освіти, Київ. Наука та інновації. 2009. Т. 5. № 3. С.72–88.
- [14] Ворона В.В. Програма технологічних інкубаторів Ізраїлю, як вагома підтримка розвитку приватного бізнесу в країні / В.В. Ворона // Економіка і регіон. 2009. № 2(21). С.213-220.
- [15] Сакун А.С. Национальные стратегии развития технопарков: зарубежный опыт / А. С. Сакун // Региональная экономика: теория и практика, М.: ООО Издательский дом «Финансы и кредит». 2014. № 4(355). С.57-66.
- [16] Чудаєва І.Б. Технополіси: економічна суть, причини створення та японський досвід / І.Б. Чудаєва // Економічний часопис XXI. 2010. №11-12. С.55-59.
- [17] Annual Statistics –Initial Findings September 2013 [Електронний ресурс] / The United Kingdom Science Park Association. Режим доступу: http://www.ukspa.org.uk/ukspa publications/reports statistics.
- [18] Driving Regional Innovation and Growth: Results from the 2012 Survey of North American University Research Park [Електронний ресурс] / Association of University Research Parks. Режим доступу: http://www.aurp.net/battelle-report.
- [19] Мехеда Н.Г. Особливості та проблеми формування інноваційної інфраструктури в Україні / Н.Г. Мехеда, К. Завадська // Вісник Черкаського національного університету ім. Богдана Хмельницького. – 2010. – №4. – С.36-40.
- [20] Justyna Dabrowska. Measuring the success of science parks: performance monitoring and evaluation / Justyna Dabrowska // XXVIII IASP World Conference on Science and Technology Parks. – 2011. – P.1-23.
- [21] Антициклічне регулювання ринкової економіки: глобалізаційна перспектива: [монографія / Д. Г. Лук'яненко, А. М. Поручник, Я. М. Столярчук [та ін.]; за заг. ред. д-ра екон. наук, проф. Д. Г. Лук'яненка та д-ра екон. наук, проф. А. М. Поручника]. К.: КНЕУ, 2010. 334 с.
- [22] Економічна енциклопедія: у 3 т. / відп. ред. С. В. Мочерний. К.: Вид. центр "Академія" 2002. Т. 3. 952 с.
- [23] Малий I. Еволюція національного, регіонального і глобального в управлінні економікою / І. Малий, О. Тищенко // Журнал європейської економіки: Видання Тернопільського національного економічного університету. – 2012. – Том. 11(№ 2). – Червень. – С. 145–160.
- [24] Мельникова В. І. Національна економіка. // В. І. Мельникова, О. П. Мельникова, Т. В. Сідлярук, І. Ю. Тур, Γ. М. Шведова. Навч. посіб. – К.: Центр учбової літератури, 2011. – 248 с.
- [25] Стратегія економічного розвитку України до 2020 року: стратегія національної модернізації. [Електронний ресурс] / Міністерство економіки України. Режим доступу: http://me.kmu.gov.ua/.
- [26] Про наукову і науково-технічну діяльність: Закон України від 13.12.91 № 1977-ХІІ [Електронний ресурс] / Верховна Рада України. – Режим доступу: http://www.osvita.org.ua/pravo/law\_06/part\_06.

- [27] Питання створення технопарків та інноваційних структур інших типів: Розпорядження від 23.01.1996 № 17/96-рп [Електронний ресурс] / Президент України. – Режим доступу: http://zakon4.rada.gov.ua.
- [28] Про порядок створення і функціонування технопарків та інноваційних структур інших типів: Постанова від 22.05.96р. № 549, зі змінами та доповненнями [Електронний ресурс] / Кабінет Міністрів України. Режим доступу: http://zakon1.rada.gov.ua/laws/show/549-96-п.
- [29] Про спеціальний режим інвестиційної та інноваційної діяльності технологічних парків: Закон України від 16.07.99 № 991-ХІV [Електронний ресурс] / Верховна Рада України. Режим доступу: http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=991-14.
- [30] Деякі питання підготовки до реалізації національного проекту "Технополіс" створення інфраструктури інноваційного розвитку та високих технологій" і його складових: Постанова від 31.10.2011 №1014 [Електронний ресурс] / Кабінет Міністрів України. – Режим доступу: http://zakon4.rada.gov.ua/laws/show/1014-2012-%D0%BF.
- [31] Онишко С.В. Фінансове забезпечення іннноваційної діяльності / С.В. Онишко, Т.В. Паєнтко, К.І. Швабій // Навч. посіб. К.: КНТ, 2008. 256 с.
- [32] Про внесення змін до Закону України "Про Державний бюджет України на 2005 рік": Закон України від 25.03.2005 р. № 2505 – IV [Електронний ресурс] / Верховна Рада України. – Режим доступу: http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=2505-15.
- [33] Про внесення змін до Закону України "Про спеціальний режим інвестиційної та інноваційної діяльності технологічних парків": Закон України від 12.01.2006 р. №3333 – IV [Електронний ресурс] / Верховна Рада України. Режим доступу: http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=3333-15.

#### 2.3 State regulation of insurance service market of Ukraine

Transitional economy increases the risk of all areas that require active measures to create a market of insurance services as well as the effective and the balanced state intervention in the reform process. Thus, the objective of the development of the insurance market requires elaboration and implementation of a holistic mechanism of state regulation and support of the insurance business, providing certain guarantees of investment activities of insurers. In the current economic conditions insurance market plays one of the main roles in providing the protection of the entrepreneurs and legal bodies' property interests and longterm investment in the real economy of Ukraine.

In recent years the development of insurance business in Ukraine is being accompanied by improvement of the regulatory framework, the introduction of new insurance products, the using of measures to enhance the reliability of insurance companies and insurance intermediaries [6, p. 235].

One of the most important problems of the Ukrainian insurance market is the legal providing system and government regulation of insurance activity that need to be improved, whereas the current legislation of Ukraine is not completed. In addition, there is no clear vision of the strategic development of the domestic insurance market and its individual components. Formation of the developed insurance market of Ukraine will provide favorable conditions for market transformation and sustainable development of the national and global economy and international relationship, which determines the relevance of the research topic.

Ukrainian insurance industry is on the second place by the level of capitalization among other non-bank financial markets. The development of the insurance market, as an integral part of the Ukrainian financial market, depends on the list expanding of insurance products and services, increasing their competitiveness, increasing requirements to order the creation of insurance companies, further integration into international structures, the involvement of

the insurance market to solve the most important economic issues about the development of the country.

The questions of the development of theory and practice of insurance market formation were analyzed and researched by such scientists as V.D. Basylevych, O.D. Vasylyk, M.V. Mnich, T.A. Oral, N.V. Tkachenko [6], D.O. Tishchenko, [7] A.F. Filonyuk [8], L. Shirinyan. But the current crisis of the market economy and the necessity to exit the insurance market at the global level has caused an urgent need to develop the advanced proposals related to the development of the insurance market and its regulation.

Insurance industry of Ukraine stays in the process of gradual integration into the world market, that's why the questions of the current insurance market and search for areas of improvement are not explained well enough and needs to be studied deeply.

As the result of the research, there will be the deep analysis of current trends in the insurance market of Ukraine and identified areas of improvement of its functioning.

The insurance market is extremely complicated multi-level system that consists of a number of interrelated and interdependent subsystems, such as insurance products, rates, sales organization and creating demand, infrastructure and so on.

Insurance market is a special sphere of monetary relations, where the object of sale serves a specific service – insurance protection, emerging supply and demand for it [8, p.73].

State supervision of insurance business in Ukraine is being completed in order to follow certain requirements of the legislation of Ukraine on insurance, more effective development of insurance services, protecting the interests of policyholders and insurers avoid insolvency.

Creation of a stable insurance market that can compete under globalization and is able to provide to Ukraine the rightful place on the world market is a strategic task of the state. Public policy should be directed precisely on the concentration of the insurance market. In addition to improving the system of state regulation of the insurance market today there was also the need to improve public policy in the field of economy of Ukraine. In particular, those are the formation of legislation and efficient mechanism for regulation and supervision of the insurance market as one of the necessary components which are already adapting Ukrainian insurance legislation to European and international standards.

The insurance law is the base for the construction insurance market in the country. It should define the general principles of insurance, forms of organization of state insurance regulation and so on.

One of the important areas to improve state regulation of insurance activity in Ukraine is the creation of effective demand for insurance services. This issue should be addressed, on the one hand, by the formation of citizens with the organization of insurance protection through insurance, on the other hand, by rising living standards that will facilitate the creation of conditions to meet this need. If during the early formation of the insurance market in our country the main focus of government regulation was focused on the organization of access to this type of activity, today more attention should be paid to financial conditions of already working insurers, compliance with laws and other legal norms in order to respond to possible failures in their work in time. This will give the step to increase the stability of the national insurance system and increase the authority of the insurers to potential consumers of insurance services.

According to the National Commission for State Regulation of Financial Services Markets, the total number of insurance companies as of 30.09.2016 amounted to 323, including insurance companies "life" – 43 companies, insurance companies, "non-life" – 280 companies. As of 09.30.2015 - 368 companies, including insurance companies "life" – 50 companies, insurance companies, "non-life" – 318 companies [1]. Changes in the number of insurance companies in Ukraine are shown in Fig. 2.10.

There is a tendency to reduce the number of insurance companies, for example, in 9 months of 2016 compared to the same period in 2015, there was a decrease by 45 insurance companies.

Gross premiums received by insurers for insurance and reinsurance risks from insurers and re-insurers for 9 months of 2016 amounted to 24844.2 million UAH, including 9469.6 million UAH (38.1%) – submitted by individuals; 15 374.6 USD (61.9%) – received from the entities [5]. In comparison with 9 months of 2015 to 3 125.5 million UAH or 14.4% of revenues increased gross premiums (Fig. 2.11), the amount of net premiums written increased by 2 842.0 mln UAH, that is 17.0%.

The increase in gross premiums touched almost all types of insurance, for instance: motor insurance (CASCO, MTPL, "Green Card") (an increase of gross premiums at 1 085.6 million UAH – 19.0%); life insurance (increase in gross premiums at 483.9 million UAH – 32.2%); health insurance (increase in gross premiums at 317.3 million UAH, that is 21.5%); insurance third party liability (increase in gross premiums at 267.0 mln UAH, or 26.6%); and risks of natural phenomena (increase in gross premiums at 263.2 million UAH –18.4%); property insurance (increase in gross premiums at 243.0 million UAH – 9.5%),

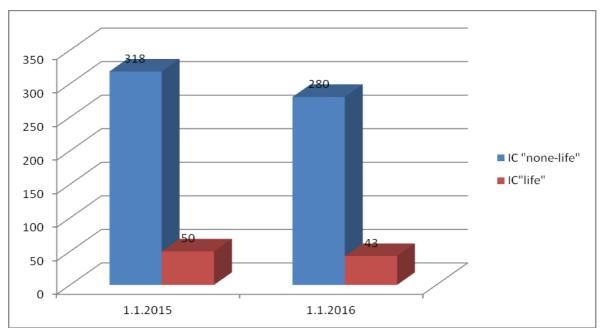


Fig. 2.10 Graphical interpretation of the number of insurance companies in Ukraine

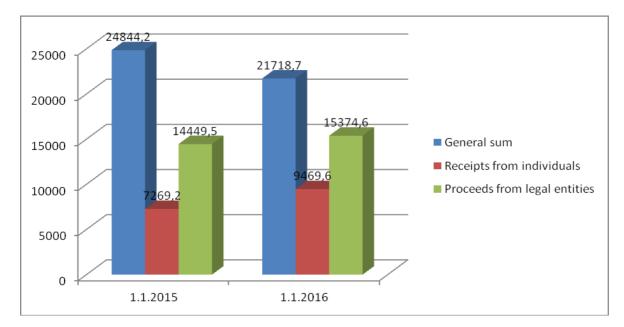


Fig. 2.11 Graphical interpretation of gross premiums received by insurers, mln UAH

accident insurance (increase in gross premiums at 221.3 million UAH – 59.0%); medical expenses insurance (increase in gross premiums at 209.5 million UAH – 58.7%); credit insurance (increase in gross premiums at 189.8 million UAH – 64.6%); cargo and luggage (increase in gross premiums at 123.3 million UAH – 4.6%) [5]. Dynamics of the structure of net premiums for 9 months 2015-2016 is shown at Fig. 2.12.

The data shows that during 9 months of 2016 there was a significant level of competition in the market of insurance other than life insurance, while the life insurance at the market monopolization seemed available enough.

Redistribution in the structure of net premiums as on 30.09.2016 was held for the following types of insurance as life insurance from 9.0% to 10.1%compared to the same period of 2015, credit insurance from 1.3% to 2.3%, accident insurance from 1.8% to 2.8%, medical expenses insurance from 2.1%up to 2.7%. Thus, there was a decreasing process in the structure of net premiums for the following types of insurance: insurance of financial risks from 10.8% to 8.0%, cargo and baggage from 7.2% to 4.8%.

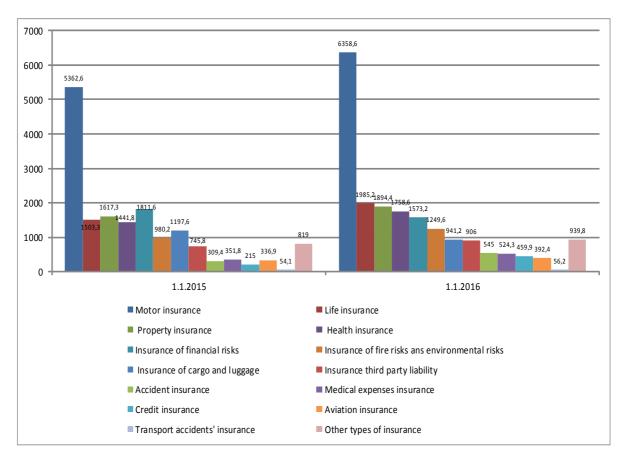


Fig. 2.12 The graphical interpretation of structure of net premiums during 9 months 2015-2016, mln UAH

The amount of companies which formed insurance reserves for September 30, 2016 amounted to 19.5 billion USD. This is 12.9% more than at the end of the third quarter 2015. Provisions for life insurance companies amounted to 7.5 billion USD, technical reserves to other insurers – 12 billion USD, respectively, 20.9% and 0.08% over the same period last year.

As a result of Natskomfinposluh attempts to improve the reliability of placement of insurance companies' reserves, their structure unbelievably changed. The largest share in reserves of life insurance companies (IC 43) belongs to the government securities (47.3%) – in the reporting period it increased from 2.2 times to 3.5 billion. The share of bank deposits in reserves of life insurance companies (40.4%) decreased from 8.8% to 3.5 billion. Significantly, the share of corporate securities – shares (0.3%) and bonds (1.4%) in the reserves for life insurance - by 93.1% and 69.1% to 20.4 million and

101.3 million UAH accordingly, especially by removing "junk securities". In contrast, the share of claims to reinsurers by 2.7% to 107.7% to UAH 197.1 million [2].

Total assets of insurance companies as for September 30, 2016 amounted to 55.4 billion USD. This figure has decreased comparing to the previous year up to 8.6% - whereas it was 60.6 billion USD. Despite the reduction of their quantity, life insurance companies increased their assets - from 9.5 billion to 10.7 billion, or 13.3%. Thus, a characteristic feature of the balance and, furthermore, the assets in the life insurance sector, is that 70% of the assets of insurers are providing life insurance reserves and in almost all companies these assets meet the quality and diversification of established Natskomfinposluh.

The implementation of effective state regulation of insurance today is a very important issue, because the conditions of the insurance sector can be one of the leading parts of the financial system, functional capacity, which is aimed at preventing or minimizing the negative effects in case of various insurance risks, as well as the formation and use of its own investment potential, which generally provides welfare, stimulates the activity of businesses and enhances eco term security.

Nowadays, the National Commission for state regulation of financial markets is the specially authorized body, entrusted with the functions of control and supervision of the activities of the insurance market and the implementation of state policy in the field of insurance. However, it should be noted that in recent years the issue of creating a single financial market megaregulator by turning down the departmental controls, as happened in most major countries, was not considered only for a one time.

This issue causes various poignant discussions among the academics and practitioners about its feasibility of implementing an integrated system of regulation of the financial sector of the national economy, which leads to having controversy in the formation of the conceptual bases of improvement of state regulation of insurance and determination of the conditions to enhance the functioning of the insurance market of Ukraine.

The idea of creating megaregulator financial market is not new to the world's economy. Indeed, the megaregulation model is quite a common model of supervision of the financial sector in most major countries.

Before having created a single financial regulator in these countries there were some regulatory institutions of different segments of the financial market, but the result of the introduction of a new universal model of regulation of the financial markets demonstrates the formation of a coherent and simplified regulatory framework necessary for the effective management and development of the financial system.

The main factors for reforming the system of state regulation of the financial market of Ukraine were the signature of the Association Agreement between Ukraine and EU in 2014, the approval of the Strategy for Sustainable Development "Ukraine – 2020", the purpose of which is to introduce European standards in Ukraine of living and the Ukrainian step to the leading positions in the world, and the development and adoption of the comprehensive program of Ukraine's financial sector by 2020, the provisions of which define a comprehensive restructuring of the financial sector and in accordance with new approaches to supervision and regulation of the financial services markets.

Reform of state regulation of the financial market of Ukraine meets modern world trends of consolidation of control and supervisory functions in a single institution and is the basis which creates conditions for economic growth and the implementation of tasks towards integration into the European and world community. However, this process can only take place through evolution, implying gradual transition to an effective system of state regulation, which will take into account the good practices of the European Union in this area

The EU insurance regulation is based on:

- first Council Directive 73/239/EES of 24 July 1973 about the harmonization of the laws and regulations concerning the taking up and pursuit of direct insurance other than life insurance,
- second Council Directive 88/357/EES of 22 June 1987 about the coordination of laws, regulations and administrative provisions that relate to direct insurance other than life insurance, which defines provisions to facilitate the effective exercise of freedom to provide services and amending Directive 73/239/EES,
- third Council Directive 92/49/EES of 18 June 1992 about the coordination of laws, regulations and administrative provisions relating to the 172 direct insurance other than life assurance and amending Directives 73/239/EES and 88/357/EES Council Directive 73/240/EES of 24 July 1973 concerning the abolition of restrictions on freedom of establishment in direct insurance other than life insurance,
- directive 2009/138/EU of the European Parliament and of the Council of 25
   November 2009 "About the beginning and pursuit of the business of insurance and reinsurance, including solvency II" and other legislative acts of the EU.

Several features of state regulation of insurance introduced by these directives had not found their reflection in the Law of Ukraine called "About the insurance". However, their implementation in Ukrainian legislation has significantly improved the effectiveness of state regulation of the Ukrainian insurance market.

It is necessary to consolidate in the Ukrainian legislation as an additional ground for refusal regulator to issue licenses for insurance the close links between the insurance company and other natural or legal persons, if the regulator will have the reason to believe that this relationship will hinder the effective exercise of its supervising functions. These rules which are in Article 8 of First Council Directive 73/239/EES [14], can greatly reduce the risks of corruption while performing control of their powers. Nowadays, the procedure

of issuing the licenses for insurance verification involves the check of the higher economic management education of the insurance company, but does not include the check of its links with officials of the regulator. At the same time, if the lack of economic education in the management of the insurance company only harms it and has the bad influence on the customers, the corrupt connections cause damage throughout the insurance market, and even more throughout the whole system of public administration, leveling its supervisory function and discrediting it.

Also it would be necessary to borrow the powers of the regulator from EU law, which in exceptional circumstances would give it the opportunity to restrict or prohibit the free disposal of the assets of the insurance company if the state regulator has the reason to believe that the financial situation of the insurance company will go down in the future (if either insurance of the company does not comply with the requirements of the state to establish adequate reserves of insurance or their volume decreased, and if the regulatory solvency margin falls much lower than level of the guarantee fund of the insurance company). According to the Ukrainian legislation, the nowadays regulator is an opportunity to reorganize the insurance company. However, the European approach seems to be much more restrained because it allows the regulator to intervene more time without bringing the matter to the restructuring, and also avoid bankruptcy ahead of the organization. In addition, by giving the regulator the possibility to limit the disposal of assets of the insurance company in case of doubt in its financial condition and solvency would significantly reduce the number of dangerous criminal as fictitious bankruptcy (regulator would not allow the company to transfer assets to nominees).

Noteworthy are also the provisions of Art. 15 (a) of Council Directive 73/239 / EES [14], which provide requirements for insurance companies that carry credit risk insurance, to establish a reserve alignment. We believe that the improvement of Ukrainian legislation on insurance should happen by the development and adoption of a qualitatively new Law of Ukraine "About the

insurance" – the editorial, in which the Ukrainian law insurance, including state regulation of insurance, will be harmonized with the European one, and not by making certain changes to existing legislation (which are only temporary problems). The adoption of the new law will solve a number of issues related to the need to harmonize the Law of Ukraine "About the insurance" and the Civil Code of Ukraine, laws "About the Financial Services and State Regulation of Financial Services", "About the compulsory insurance of civil liability of owners vehicles", "About the private pension provision" and other regulations.

The process of state regulation of insurance service can greatly improve administration restrictions on the legal form of the insurance companies. If the insurance company only creates a joint stock company, information on their activities will be opened, as their statements could be published in the media and, also, on the website of the National Commission on Securities and Stock Market will also be opened about the owners. This will enable Natskomfinposluh to effectively control the insurance companies and policyholders - the ability to monitor the results of these companies freely, without further recourse to them.

The proposed changes do not only fully comply with the latest global trends of regulation of insurance services as well as trends of change the legislation of Ukraine this direction (the new version of the Law of Ukraine "About securities and stock market", the amendments to the Law of Ukraine "About Banks and Banking Activity").

According to the new version of the Law of Ukraine "About insurance", the state must issue permits to improve cross-border insurance. Thus, in our opinion, the legislation should prohibit cross-border insurance, except of insurance of risks relating to maritime shipping, commercial aviation, space rocket launches and freight (including satellites) if property interests are the object of insurance that are related to the goods being transported, and / or the vehicle in which they are transported, and / or any responsibility, arising from such a transportation. Implementation of mediation in favor of non-resident insurance companies for

insurance of such risks may be allowed. After a transition period (e.g., five years) the prohibition of brokering insurance brokers in Ukraine can cancel that can provide relevant obligations to Ukraine to join the WTO improving the needs and issues of state regulation of financial services in reinsurance. The above line of financial services has not resolved Ukrainian legislation yet. However, professional reinsurance exists almost in all countries and, according to EU Directive 2005/68 / EU such activities may have been regulated under the same principles as the ordinary activities of insurance companies. Thus, the same principle of regulation should be incorporated in the Ukrainian legislation.

The reform of public administration of financial services market in Ukraine (including insurance) must be accompanied by the introduction of a new order of registration of the insurance company, the order that is closer to the European standards. In addition, the legislation is advisable to introduce the obligation of the insurance company to systematically apply body performing state regulation of non-banking financial services, list of related persons in order to exercise that authority prudential supervision of the insurance company. The need for such norms based on international practice, which shows that the majority of bankruptcies were caused by insurance companies is the conclusion of many agreements to unreasonably favorable conditions for insurers, what undermined the solvency of the insurance company.

Within the public administration reform of insurance markets, branches of insurance companies for non-resident insurance activity in Ukraine must obtain a license from the relevant government regulator. The fundamental difference from current procedures for authorization must explain that the state can control on-line to obtain information about the financial condition of the insurance company non-resident located outside Ukraine, and cooperate with relevant foreign regulators. One of the conditions of insurance companies-residents are signing a memorandum of understanding with foreign regulators.

The effective state management of markets is impossible without a clear definition of the "substantial participation" concept. World practice shows that

shareholders of insurance companies have a very significant impact on their activities, so in terms of quality and adequate management these companies could become insolvent due to inadequate actions of the shareholders. In the EU, the USA, Canada the recognized threshold that defines a shareholder of the insurance company as the owner of significant share is 10% package of shares. Taking into account the features of corporate legislation of Ukraine, a new version of the Law of Ukraine "About insurance" will be advisable to set thresholds stakes of 25%, 50%, 75%, transfer of ownership which requires prior permission of the state regulator in the financial services. The essence of the prior consent of the insurance company is that the regulator must know in advance the next owner, since the change of ownership changes for individuals who influence the policy of the insurer.

At the legislative level, the state should also be introduced to the demands of corporate management insurance company. Among these requirements, the availability list of mandatory controls the insurance company is included. International experience demonstrates the need for legal regulation of corporate governance, as this is the only way to achieve transparency and protection of insurance policyholders against possible poor management. State regulator the Financial Services will have to monitor the compliance of the corporate governance requirements of state insurance company.

The control over the activities and financial performance of insurance companies needs strengthening of certain legal. For example, it may be appropriate to set up the duty of the insurance company to make an annual audit of the external auditor. The external auditor must be independent and included in the register of auditors to conduct audits of financial institutions. In addition to the standard duties of the external auditor of the new Law of Ukraine "About insurance" expedient to introduce a duty to inform the public regulator of financial services in the event that the external auditor has reason to believe that the financial condition of the insurance company deteriorated, the internal audit system is working properly or have any other violations of insurance laws.

Most Ukrainian insurance questions for adaptation to EU legal provisions apply to all types of insurance. However, while adapting the legislation of Ukraine (particularly in public administration insurance markets), it is necessary to take into account the fact that the European laws state regulation of some specific insurance is characterized by certain specifics and availability of their regulatory sources. This is especially true of this segment of the insurance market, as life insurance. Ukraine does not have specialized legal act that would define the specifics of state regulation of insurance services for life insurance. As for the EU, for a long time the EU accepted a large number of directives that regulate the issue of life insurance. This created a significant number of conflicts and contradictions between them. There is a need for harmonization of EU legislation on this issue in a coherent and logical directive. As a result, 2002 was approved by the European Parliament and Council 2002/83 / EC of 5 November 2002 concerning life assurance [13]. This Directive contains a definition of an insurance company, which prevents insurance companies from third countries operating within the European Community, through the use of the freedom to provide services approved in the EC Treaty [1, p. 21]. The Directive applies to both individual and group life insurance policies, but does not apply to the management of group pension funds. The directive also differentiates agreements that customers placed their own initiative, and all other contracts that require a higher level of consumer protection, particularly on the part of state regulation of financial services.

Comparing to European, the Ukrainian legislation contains fewer types of life insurance. In particular, there are no such species (in this case, if the activity is subject to supervision of the competent authorities):

 insurance system, the essence of which is to create a group of people and implementation of a common fund payment to the person who will exist longer than the rest of the members of the fund,  payments system, the essence of which is to advance the implementation of agreed lump sum or periodic payments as consideration for that person assumes the obligations set a specific time [3, p. 57].

There are differences with the model of public administration services and insurance markets in the legalization life insurance. The directive 2002/83 / EC established the requirement to provide information on existing majority shareholders before the authorization (Art. 8). Changing the amount of shares owned or will be owned by the majority shareholder, requiresto inform the competent authorities upon reaching certain thresholds (Art. 15). In addition, this article establishes the requirement legal entity that intends to engage in insurance activities, inform the competent authority of the majority shareholders (legal or natural persons) or members who are directly or indirectly related to the subject. In addition, people who intend to become majority shareholders of the insurance company shall notify the competent authority of the size of their future share in the insurance company if their share will be equal to or greater than 20%, 33% and 50% of the total votes of shareholders.

Unfortunately, in Ukraine, this rule can not be implemented in the near future as part of the article 2 of the Law of Ukraine "On insurance" are allowed to the first create insurance institutions in the form of stock, full, limited partnership or additional liability according to the Law of Ukraine "On Business Associations". In our opinion, such a variety of legal forms of business companies complicates the state regulation of the insurance market and supervision of insurance activities. It would be appropriate to address long European practice under which insurance companies only formed a joint-stock company, which is enshrined in the law of most countries.

After consolidation of the Ukrainian law rules on the company as the only form of legal entity that can conduct insurance activities, it is possible to provide the national regulator in the financial services broad powers to control the majority shareholders of the insurance company. According to the directive 2002/83 / EC, mandatory state requirements are also established to invest insurance reserves and rules of investment diversification. In article AOR Law of Ukraine "About insurance" indicated that the costs of insurance reserves should be placed on the basis of safety, profitability, liquidity, diversification, and also lists the categories of assets. In addition, the law states that restrictions on the maximum amount of assets in each category, quality requirements such assets, requirements concerning the availability and the credit rating of the assets of certain categories and / or banks and issuers that have placed the funds of insurance reserves established by the competent authority in the field of state regulation of non-banking financial services. [12]

However, European legislation such as the Directive 2002/83 / EC does not give state regulators discretion to change the requirements for quantitative indicators of insurance reserves. Article 24 of Directive clearly specified percentage thresholds, which should benefit the insurance companies when investing their assets. [13]

Requirements for investing the assets of insurance companies in accordance with the European practice of government financial market should be established by the Verkhovna Rada of Ukraine at the level of the law of Ukraine, not subordinate regulatory acts (as investment assets of the insurance company directly affects the level of financial stability and the likelihood of bankruptcy, and therefore one of the key issues in the field of financial policy). Just do not meet acquis communautaire requirements for the establishment of minimum guarantee fund of an insurance company. According to the second paragraph of Article 30 of the Law of Ukraine "About insurance" the minimum capital of insurance company which deals with types of insurance other than life assurance set equivalent of 1 million euros and the insurance company engaged in life insurance – 1.5 million euros at the exchange rate of currency Ukraine. At the same time in point 2 of the Directive 2002/83 / EC it is stated that the

guarantee fund insurance company that provides life insurance to be almost twice that amount to at least EUR 3 million.

Despite the necessity to bring Ukrainian legislation in line with EU standards, we can not consider it appropriate to increase the value of the guarantee fund of the insurance company to European standards immediately. The reason is a significant difference between macroeconomic indicators of EU member states and Ukraine, as well as general weakness and the development of the insurance market (especially life insurance) compared to the EU member states.

Consequently, the current insurance market of Ukraine in its development is characterized by certain disadvantages and some achievements, including the shortcomings of the insurance market include:

- imperfect system of legal support and state regulation of insurance,
- the absence of domestic market development of insurance service strategy and what it consists of,
- the lack of qualified experts of insurance business,
- a decrease in demand for insurance companies due to the deteriorating financial condition of the population,
- the lack of reliable long-term instruments and safeguards and return of investment,
- inability (under the law) to deposit insurance reserves in hard currency, leading to impairment of insurance reserves, due to the instability of the currency,
- the lack of confidence of individuals and entities to the insurance companies,
- the lack of quality and timely statistical information, and the lack of detailed information and analytical materials on the status, and problems of formation of the insurance market of Ukraine.

The positive trends of the insurance market include:

- strengthening of the insurance market by bringing players who do not meet the solvency and reliability,
- assets of insurance companies that remain in the insurance market of Ukraine, to meet the quality and diversification of established Natskomfinposluh,
- improvement of insurance culture among managers and the public.

Ukraine stays far behind in the process of bringing the regulation of insurance activities in line with international standards. As the liberalization shoes, the Ukrainian insurance market is the closest to the national type. In the process of market liberalization, there are lots of stages, leading conservative on the open market. According to this periodization, Ukraine is in the process of limited liberalization nowadays. So, nowadays, the Ukraine's insurance market is under development, so has both definite advantages and numerous disadvantages: growth of the insurance market stay behind the growth of the economy and its part of GDP is insignificant. But the Ukrainian insurance market has huge resources for its development.

The scientific research allows to state that Ukraine's insurance market is an effective means of redistribution of funds that were previously collected for further investment in the development of the economy.

Analysis of the integration processes in the insurance market of Ukraine suggests the insufficient degree of development and the need for further liberalization, designed to facilitate the integration of international financial center.

In Ukraine as in the global insurance market, there is a process of increasing the capitalization of national insurers merge insurance, banking and industrial capital. Trade liberalization insurance services entering Ukrainian insurers in foreign markets, but the presence of national insurance capital is negligible to them.

Consequently, nowadays the state regulation of the insurance market in Ukraine is still not fully meet European standards. His adaptation must be accompanied by a change in a number of legal acts in the field of insurance (in particular, the development and adoption qualitatively new Law of Ukraine "On insurance") and the implementation of them European standards. At the same time, the improvement of governance in the financial services markets should not be limited to the mechanical transfer of legislation familiar to European countries on Ukrainian soil. All public administration reforms of financial market should be conducted, according to the realities of the Ukrainian economy.

Government policy of insurance should be based on strengthening the foundations of the market participants, improvement of the regulatory framework, implementation of international principles and standards, and focusing on solving the above problems impeding the progressive development of the national insurance market.

#### **Reference:**

- Treaty establishing the European Community // constitutional acts of the European Union. Part / compilation. G. Druzenko; for the Society. Ed. T. Ducks. - K., Justinian, 2005. - 512 p.
- [2] The Internet Journal of insurance and reinsurance [Email. resource]. Access: www.forinsurer.com
- [3] Review of Adaptation of Ukraine to the acquis communautaire / ed. Zerkal A. K: Nick-Print, 2006. -515 p
- [4] Official Site Natskomfinposluh [electronic resource]. Access: http://www.nfp.gov.ua
- [5] On Foundations of Domestic and Foreign Policy: The Law of Ukraine on July 1. 2010 r. 2411 number-VI // known. Verkhovna Rada of Ukraine. - 2010. - № 40. - Art. 527
- [6] On Financial Services and State Regulation of Financial Services Law of Ukraine of 12.07.2001 p. Number 2664-III [electronic resource]. - Access: http://zakon3.rada.gov.ua/laws/show/2664-14
- [7] On Financial Services and State Regulation of Financial Services Law of Ukraine of 12.07.2001 p. Number 2664-III [electronic resource]. - Access mode : http://zakon3.rada.gov.ua/laws/show/2664-14
- [8] «What is Insurance»: Law of Ukraine of 07.03.1996 p. №85 / 96-VR [electronic resource]. Access:
- [9] Site of All-Ukrainian Association NGO "Association of Insurers of Ukraine" [Email. resource]. Access: http://insurhelp.org.ua/polls.html#2.
- [10] Tkachenko N. «International practice of constructing deposit insurance» / NV // Financial Tkachenko space. - 2014. - № 4. - P. 235-244
- [11] Tishchenko D. «The need to improve the system of state regulation of insurance in Ukraine» // Securities Market of Ukraine. 2012. №9. S.95-100
- [12] Filonyuk A. «Insurance Market of Ukraine as an object of state regulation» / AF Filonyuk // Investments: practice and experience. 2009. №22. P. 73-77

- [13] Directive 2002/83/EC of the European Parliament and of the Council of 5 November 2002 concerning life assurance //Official Journal L 345,19.12.2002,P. 1-51.
- [14] First Council Directive 73/239/EEC of 24 July 1973 on the coordination of laws, régulations and administrative provisions relating to the taking-up andpursuit of the business of direct insurance other than life assurance // Official Journal L 228, 16.8.1973, P. 3-19.

### CHAPTER 3 MODERN PRACTICES OF COMMUNICATIVE PROCESS IN PUBLIC MANAGEMENT: NEW CHALLENGES AND OPPORTUNITIES

#### 3.1 E-governance and quality of information in the state authority system

The development of public administration and local government in Ukraine is accompanied by a significant increase in information flows related to the exchange of information necessary to make effective management decisions. The task of improving the efficiency of public administration and local government defined by the ability to analyze information and prepare it for decisions making and monitoring their implementation. In this regard, implementation of the model of "electronic government" should be seen as a tool to transition to a new quality of public administration and local government.

Information is an important resource for organizations. The data collected by organizations is growing in volume and complexity. As such, they are abandoning traditional methods and relying more heavily on information systems to aid in the analysis and utilization of time-sensitive data and organizational knowledge. Information systems are popular in the government administration and local government. They improve effectiveness and efficiency afforded by real-time decision support. Information technologies, including Internet-based information systems, are playing vital and expanding roles in public administration. Information technology can help all kinds of government systems improve decision making, and workgroup collaboration. Information technologies and systems are an essential ingredient for success in today's dynamic global environment [15].

Today every stage of development of society is determined by the degree of information technologies. The important stage of development of these technologies is the information society. The distinguishing characteristic of the information society is the freedom of access to information and freedom of its dissemination. This contributes to the improvement of democratic procedures, increase business activity, development of fair competition, ensuring consumer

rights. It also prevents the threat of "oligarchization" of economy, bureaucracy and inefficiency monopolistic structures, poses a barrier to the degradation of the economy and corruption. There is also a determination that the information society is a society, in which the crucial roles play: the acquisition, processing, storage, transmission, dissemination, use knowledge and information, including through technical capabilities that are constantly being improved.

Public administration and local government are characterized by the use of modern computer technologies that ensure timeliness, accuracy, relevance and reliability of management information. Development of public administration and local government systems is realized in the direction of knowledge-intensive administrative work. It imposes special requirements to civil servants in the development of modern management, the use of information technology. Information is a resource without which we cannot use modern management techniques [3]. This requires continuous improvement of information systems in public administration. Results of information technology can be strategic and tactical. Tactical can reduce costs of management process. Reduced costs associated with reducing the complexity of information processing, reduction of consumables, storage and working space. Also is reduced the interaction of government and citizens. Strategic results, which associated with improving the quality of management decisions, raise the public confidence to the government and reduce costs for maintenance of power. This is the strategic objectives and the core of e-Government. Information system of public administration is seen as open to cooperation with other information systems.

The traditional model of governance is based on the principle of hierarchy, but the transition to an information society leads to a radical rethinking of the role and structure of public administration. In addition, globalization leads to the fact that the state authorities of various countries often interact on multiple levels from local to higher. In many countries the responsibility for services to the public transmitted from the central authorities to the local and regional level [1]. The tool of solving many problems caused by the use of hierarchical model of public administration is e-Government. E-Government is seen as a new trend of using the Internet and is the main way of spreading information technology and realization of ideas of information society. The introduction of e-Government requires analysis of situation with all its components, and analyzing the readiness of the public administration and local government to use modern information technologies in their work [7].

Analysts of World Economic Forum (WEF) published a report on the development of the information society in the world (The Global Information Technology Report 2015). The report describes recent changes in Networked Readiness Index for different countries, have been assessed the factors, policies and institutions that allow countries to make full use of information and communication technologies (ICT) to improve the competitiveness and prosperity. According to the Networked Readiness Index for 2015, in dozen of leading countries with the most effective use of information technology included Singapore, Finland, Sweden, the Netherlands, Norway, Switzerland, USA, United Kingdom, Luxembourg, Japan. Ukraine now stands at the 71 position. Its closest neighbors are Moldova - 68, Romania - 63, Slovakia - 59, Hungary - 53, Poland - 50.

The Networked Readiness Index determines the level of ICT development in the world. It consists of subindexes such as Environment, Readiness, Usage and Impact. They describe the roles of government, business and society in shaping the environment for ICT. Figure 1 shows a chart that displays the key indicators of ICT development in Ukraine [20].

The structure of the indicators of ICT development include: 1) political and regulatory environment, 2) business and innovation environment, 3) infrastructure, 4) affordability, 5) skills, 6) individual usage, 7) business usage, 8) Government usage, 9) economic impacts, 10) social impacts. The blue line on the graph represents the state of ICT in Ukraine, gray line - the status for the group of countries with below average incomes. Chart shows that in Ukraine the highest value of these indicators are: affordability and skills related to the information

systems and technologies. The worst situation with the indicators that characterize: political and regulatory environment, business usage, government usage, the economy and social impacts.

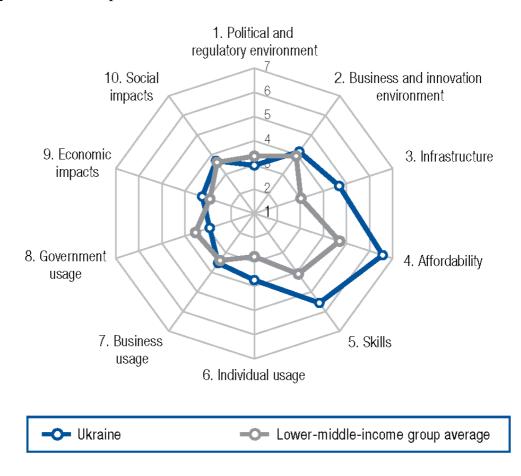


Fig. 3.1 Main indicators of ICT development in Ukraine

Ukraine showed the highest ranking position of the Networked Readiness Index in 2009 (position 62). Then over the next two years were lost 28 points, so that in 2011 our country has moved to the 90 position among 138 countries. In recent years, given the expansion of the countries participating in the rating, Ukraine is included in seventh dozen countries and concedes CIS countries and Eastern Europe.

The foundation of implementing the concept of "e-Government" is a document management system for regional government. In Ukraine the effectiveness of vertical and horizontal cooperation between authorities plays a huge role in the effectiveness of the regional authorities. The implementing of document management systems and document archives will improve the document management and decision making in regional government, transparency and control of administrative decisions as a whole [2].

For study the flow of government documents are used the scheme of information flows that take into account the main sources of information that comes to the organization as well as consumers of information. The sources which send information from local governments are: Cabinet of Ministers of Ukraine, Presidential Administration, Verkhovna Rada of Ukraine (Parliament), Central Executive Authorities, Regional and City State Administrations, other local governments, organizations, enterprises and citizens. The consumers of information are the same agencies, organizations, central and local authorities, citizens.

Research results in the public administration and local government for few years show that the number of processed documents is increased. During the period from 2010 to 2014, this number increased 1.7 times. Research conducted in the Local authorities in 2001-2009 years show an increase in the number of documents in 2-2.2 times, corresponding growth rate fixed in subsequent periods [5].

Studies show that against the background of preservation quantitative composition of civil servants we can see steady growth in the number of documents processed by the system of public administration and local government. Using of powerful computer systems offsets the high workload for staff. However, a quantitative increase in the documents flow does not improve the quality of decisions made. The state of government system and the need of its improvement indicate that the system "mechanically" increases quantitative performance but not the quality of management decisions.

Under Article 133 of the Draft Law on Amendments to the Constitution of Ukraine (concerning the decentralization of power) № 2217 dated on 01.07.2015. Administrative and territorial structure of Ukraine consists of administrative units, communities, districts, regions. The territory of Ukraine is divided into

communities. The community is the primary unit in the system of administrative and territorial structure of Ukraine. Some communities make up the area. Article 140 states that the local community executes local government both directly and through local governments through self-regulation of public affairs of local significance and management within the Constitution and laws of Ukraine. Community council is an executive representative body of local government. The executive bodies of local self-government communities are controlled and accountable to community council [6]. Decentralization of power requires the use of new management methods using modern information technology. A new approach to governance also requires improved mechanisms for its implementation. The main feature of the new system of government is that it decreases the management influence from the national level. At the same time there is a problem of coordination of executive bodies in the system of local government that do not create a hierarchical structure consisting of administrative units.

The current system of state and local governments based on the principles of functional (hierarchical) management approach associated with delegation of authority and responsibility through the functions. The function is seen as a subsystem of an organization allocated on the basis of similarity of work. It is a system of delegation of authority and accountability that permeates the entire organization. However, horizontal links between structural units are weak, and vertical - are strong. The civil servant doing his job and he is responsible for his functions. He is not interested in the functions and results of the work of parallel departments. The main disadvantage of this approach is the isolation departments from one another, which leads to monopolization of decisions; to high specialization of workers, that does not allow them to see emerging problems in general; the criteria of performance for functional department are chief's assessments, not the results of the business process; the inefficiency of information support of life cycle processes, etc.

The weakening of the hierarchy in the system of government requires the use of other methods of control in organizations that would coordinate the activities and use horizontal integration without subordination to each other. In this case, the most appropriate is a process approach to management, which is associated with delegation of authority and responsibility through business processes where business process is stable (repetitive) activity, which transforms resources (inputs) into results (outputs). The advantage of this approach is that the technology business process description ensures transparency of all operations and allows analyzing the possible consequences of failures at some stage of work, time to find and fix the error. Another advantage of the technology is possibility to manage operating costs. Process approach to management allows managers to identify and manage key processes in the performance of the organization to integrate disparate actions of functional departments and their efforts to obtain the overall result. The main provisions and advantages of the process approach set out in the international quality standard ISO 9000.

In 2014 was issued a new standard ISO 18091: 2014 "Quality management systems – Guidelines for the application of ISO 9001:2008 in local government", which explains how the quality management system is implemented in public administration and local government. According this standard the typical examples of local government processes are: strategic management processes to determine the role of the local government in the socio-economic environment; provision of resources and the capacity to provide the product/service of local government; processes needed to maintain the work environment; preparation, revision and updating of development plans and work programs; monitoring and measurement of the product/service provision process; f) transparent internal and external communication processes; processes to address emergency preparedness and response to crises [14].

The process approach is a management strategy. When managers use a process approach, it means that they manage and control the processes that make up their organizations, the interactions between these processes, and the inputs and

outputs that tie these processes together. It also means that they manage these process interactions as a system. Using of a process approach within a single organization provides allocation of horizontal processes (business processes) and their participants, the appointment of one of the participants as a process owner, the delegation of authority and responsibility. In this case, a matrix organizational structure is used. The matrix organizational structure is one of the primary forms of structures that are adopted by organizations to carry forth their work. In this, a structure is adopted that groups employees according to the functions and products. A matrix organizational structure combines two types of organizational structures namely the product organizational structure and the pure functional structure to create a unique blend of work environment. This structure and design is most useful for when the assignments are project driven, because in this, several professionals with distinct functioning powers will be hired to carry forth the functions. Participants of horizontal process are subordinate to both functional managers and owners of the process. It is associated with the use of two simultaneous approaches to managing regular activities - functional and process. Coordination of several organizations activity requires availability of governing body on functional basis, which could serve as a functional manager. This body may be a management system of electronic government (e-Government) is based on computer technology that will allow realize management process within the powers granted to authorities at the national level.

Compared with the functional approach, according to which the organization is divided into departments that are responsible for a specific function, process approach integrates these functions on the basis of the concept of "creating value for the consumer". There are essentially three types of processes: individual process which individual employee performs; functional or vertical process, reflecting the organization vertical; business-process, or horizontal process that crosses the horizontal system of organizational activity and represents a set of interrelated processes, providing the final results [4].

The integrated processes chain represents the internal customers, and each subsequent integrated process (and its separate operation) specifies the requirements for the previous one. The system of government can be represented as a network of interrelated processes; functional processes are linked with business-processes, each process consists of other subprocesses up to the individual servant. The success of the government system depends on how consumers of different processes are identified in the network and how well and efficiently they are satisfied. For efficient operation of system which represented as a network of relationships "consumer – suppliers" is necessary that the supplier be respectful to the customer requirements.

Experience shows that such a management structure is most effective. It provides process management team which consists of all the leaders of integrated processes who included in the cross-functional processes. Focus on process means that the main factor is prevention, not correction of errors. The impact on the process, not the outcome of the process, is the basic concept of process management. This can be done, given that the process converts inputs into outputs of the system. For implementing e-Government as a coordinating body it is necessary to create architecture model for e-Government applications. By the term electronic government, we understand the e-Government simplification and execution of information, communication, and interchange processes within and between governmental institutions, and also between the governmental institutions and citizens or organizations. The focus is put on electronic governmental services and all public transactions directed at citizens (taxation, social facilities, employment service, social security, official ID cards, health services, etc.) and at companies (taxes, company start-ups, statistical offices, customs declaration, environmental performance, public procurement, etc.) [16].

The implementation of e-Government is bound by organizational requirements which must be taken into consideration: cross-administration interaction - when implementing e-Government, Ukraine must face the problems of a de-centralized administration structure because the de-centralized

administrative units are largely independent of central government; optimization of administrative processes - the successful introduction and implementation of e-Government calls for the examination of grown processes, existing rules, processes and structures must be adapted and simplified in a suitable manner taking technical and legal circumstances into consideration; qualification of staff the use and updating of standards, along with the development, operation and correct handling of IT-supported systems, calls for the continuous exchange of information and training; involvement of users - the use of e-Government is strongly dependent on customer acceptance of the services offered, full utilization of the savings potential of e-Government is contingent upon the online services provided being accepted and used by potential users [19].

Interaction relations: the different partners involved in e-Government can be distinguished: Government to citizen (G2C) - this situation refers to the electronic interaction between citizens and administrations, this area also covers non-profit and non-governmental organizations; Government to business (G2B) this term covers electronic relations between administrations and business; Government to government (G2G) - this application covers the vast field of electronic relations between different public agencies and institutions of the public administration sector.Services are rendered to citizens, business and other administrations. The focus in this case is on the G2C and G2B interaction relations. The users of e-Government services usually do not differentiate between the central, regional levels of government and local government. Instead, companies and citizens tend to expect standardized and consistent e-Government services.

The introduction of e-Governing in Ukraine at this stage allows to reach the level of enhanced web presence in development of e-Government and provide services to organizations and population using information and communication technologies; introduce information and communication technology in many areas of public administration and local government, such as interaction in the local government system, with organizations and individuals; start the transformation of

the system of government, where information and communication technologies contribute to the transformation of the public sector. At the same time there are a number of unresolved issues in legal, organizational and technical support. Informational sphere develops slowly and not systemically, leading to the loss of Ukraine's position in the world rankings. This requires the formulation and implementation of a single and coherent public policy. For quality improvement and acceleration of development of e-Government in Ukraine needs to develop a long-term model of its implementing to the provision a detailed schedule for all responsible authorities for the implementation of tasks assigned to them; ensure cooperation between the executive authorities, local governments and civil society through the use of new information and communication technologies; to ensure the development and implementation of model pilot projects on introduction of e-Government, to create long-term budget planning and funding in the area of e-Governance; to use foreign experience for development of e-Government.

However, the most significant challenge is the improvement of the system of government by implementing of new management techniques that would allow effective use of modern information and communication technologies. One such method is the use of a process approach that involves the use of a system of processes within an organization, together with the identification and interactions and managing them to obtain the desired result. Process approach proposed as the basic approach in international quality standards ISO 9000, particularly for the authorities at the local level in ISO 18091: 2014. Implementation of process approach in the public administration and local government with the involvement of the opportunities and benefits of e-Government will improve the efficiency of government administration in Ukraine to ensure the implementation of ideas of information society.

The effectiveness of decision-making processes in government administration is dependent upon the quality of the information. Public servants have to assimilate masses of data and convert that data into information. Information is most important resource for an organization. Developments in computer technology made possible for public servants to select the information they require, in the form best suited for their needs and in time they want. This information must be accurate, concise, timely, complete, well presented and storable. Therefore it is necessary to use quality management systems in the decision-making process which are based on the concepts of ISO 9000 and TQM (total quality management).

The study of the nature and characteristics of the information used in the information systems of state authorities, substantiation of principles of formation of information resources in public administration, researching information problems of administrative activity in conditions of informatization shows that the efficiency of information systems is largely associated with the quality of information used for decision making. To achieve high information quality we must create a system of quality management for information that will allow her to work in accordance with the requirements ensuring consumers - users of information systems and consumers information product.

The standards reflect the concept of practical importance of quality in the production of goods and services. Requirements for quality systems define international standards ISO 9000. For example, the standard ISO 9001:2008 "Quality management systems – Requirements" states requirements which explain when an organization must demonstrate that it is capable of effectively and efficiently meeting customer, statutory, and regulatory requirements. Nowadays modern methods of quality management are combining total quality management (TQM) and Lean Six Sigma technologies.

The ISO 9000 family of standards has been developed to assist organizations, of all types and sizes, to implement and operate effective quality management systems. The ISO 9000 series of standards is the international standard for quality management. The objective of this series of standards is to aid supplier quality assurance and to provide a common, authoritative and widely accepted standard by which to evaluate and compare the potential of firms to meet

acceptable levels of quality and reliability. The word potential is vital here, since it looks at the system and not the product. Quality management systems can assist organizations in enhancing customer satisfaction. Customers require products with characteristics that satisfy their needs and expectations. These needs and expectations are expressed in product specifications and collectively referred to as customer requirements. Customer requirements may be specified contractually by the customer or may be determined by the organization itself. In either case, the customer ultimately determines the acceptability of the product.

The quality management system approach encourages organizations to analyze customer requirements, define the processes that contribute to the achievement of a product which is acceptable to the customer, and keep these processes under control. A quality management system can provide the framework for continual improvement to increase the probability of enhancing customer satisfaction and the satisfaction of other interested parties. It provides confidence to the organization and its customers that it is able to provide products that consistently fulfill requirements. Quality is seen as the degree of customer satisfaction. Quality metrics reflect characteristics of a product.

Quality of information has many specific features that distinguish it from material objects. On the one hand, information is a reflection of reality, but on the other - information is recorded on physical media. The first component is difficult to quantify in terms of quality and require qualitative approaches, and the second meets all requirements of the facility, which is the result of the production process. Also in relation to the first component, the main issue is the relation between information and reflection of reality. However, there is no consensus as to what is the nature of this connection.

The terms "data" and "information" do not mean the same thing. Data is the raw material in the production of information. Information, on the other hand, is facts or conclusions that have meaning within a context. Raw data is rarely meaningful or useful as information. To become information, data is manipulated through tabulation, statistical analysis, or any other operation that leads to greater understanding of a situation. For data manipulation we use information systems [11]. For the user of information system is important to obtain information that would meet its requirements. User's requirements are reflected in product specifications. For assessment of information quality we can use quality metrics.

The development of the science of information is a shift from quantitative approaches Shannon and Wiener to the qualitative characteristics of information. If the first approach is concerned the theory of communication on the basis of technical means, the second - on the study of social information, its qualitative aspect. At present there is no universally accepted definition of information. Most often information is defined as messages, news, data, facts, the signals and so on. Such definitions indicate the various parties notion of information that allows reveal only some of its aspects

Information technologies, including Internet-based information systems, are playing vital and expanding roles in government administration. Information technology can help all kinds of public administration bodies improve the efficiency and effectiveness of their governance processes, managerial decision making, and workgroup collaboration. This benefit occurs irrespective of whether the information technology is used to support product development teams, support processes, transactions, or any other activity. Information technologies and systems are an essential ingredient for governance success in today's dynamic global environment.

There is a classification of information systems. When information system applications focus on providing information and support for effective decision making by managers, they are called management support systems. Providing information and support for decision making by all types of managers and business professionals is a complex task. Conceptually, several major types of information systems support a variety of decision-making responsibilities: management information systems, decision support systems, and executive information systems. Management information systems (MIS) provide information in the form of reports and displays to managers and many business professionals to

support decision making. Decision support systems (DSS) give direct computer support to managers during the decision-making process. Executive information systems (EIS) provide critical information from a wide variety of internal and external sources in easy-to-use displays to executives and managers. For example, top executives may use touch-screen terminals to view instantly text and graphics displays that highlight key areas of organizational and competitive performance.

Several other categories of information systems can support either operations or management applications. For example, expert systems can provide expert advice for operational chores like equipment diagnostics or managerial decisions such as loan portfolio management. Knowledge management systems are knowledge-based information systems that support the creation, organization, and dissemination of business knowledge to employees and managers throughout a company. Information systems that focus on operational and managerial applications in support of basic business functions such as accounting or marketing are known as functional business systems. Finally, strategic information systems apply information technology to a firm's products, services, or business processes to help it gain a strategic advantage over its competitors [15].

These classes of information systems are used in government. The experience gained business management system is used in the system of government. This is especially true of information systems that are able to solve problems business management and public administration. It is important that these systems provide qualitative information for public servants.

Information quality (IQ) (also called Quality of information or QoI) is a multidimensional concept that encompasses critical relationships among multiple attributes, such as timeliness, accuracy, Relevance/appropriateness, availability/accessibility, reliability or objectivity, completeness, Level of detail/conciseness, The presentation of information, Value of information and others. Together, these attributes contribute to the validity of the information. Quality information is the cornerstone of sound agency decision making and inspires trust in the justice system and in the law enforcement entities that use

information. Such information enables agencies to perform their jobs efficiently and effectively [9]. It is various aspects of the information and the accuracy and validity of the actual values of the data, data structure, and database/data repository design. Traditionally, the basic elements of information quality have been identified as accuracy, completeness, currency, reliability, and context/meaning [13].

Timeliness of information reflects the length of time between the information's availability and the event or phenomenon it describes. Timeliness is a concept that material should be sufficiently current to ensure that any determination based on the record will be accurate and fair [10]. Information must be on time for the purpose for which it is required. Information received too late will be irrelevant.

Accuracy is the degree of closeness of a measured or calculated quantity to its actual (true) value. Information needs to be accurate enough for the use to which it is going to be put. To obtain information that is 100% accurate is usually unrealistic as it is likely to be too expensive to produce on time. The degree of accuracy depends upon the circumstances [21].

Relevance/appropriateness is how suitable a resource might be to an individual's needs. Relevance can be measured in terms of system performance or from the point of view of the user: the system view of relevance is that it is a measure of how well an information object matches a query, given the representation of the object and the system capabilities; a user view of relevance takes into account a deeper knowledge of the user's needs beyond what is stated in the query [12]. Information should be relevant to the purpose for which it is required. It must be suitable. What is relevant for one manager may not be relevant for another. The user will become frustrated if information contains data irrelevant to the task in hand.

Availability/accessibility is the property of being accessible and usable upon demand by an authorized entity [9]. Availability refers to ensuring the timely, reliable access to data and information services by unauthorized users. It also refers assurance that information, services, and IT system resources are accessible to authorized users and/or system-related processes on a timely and reliable basis and are protected from denial of service [17].

Reliability or objectivity deals with the truth of information or the objectivity with which it is presented. We can only really use information confidently if you are sure of its reliability and objectivity. Data reliability is the accuracy and completeness of computer-processed data, given the uses they are intended for.

Completeness refers to the extent that relevant records are present and the fields in each record are populated appropriately. Information should contain all the details required by the user. Otherwise, it may not be useful as the basis for making a decision. Ideally all the information needed for a particular decision should be available. However, this rarely happens; good information is often incomplete. To meet all the needs of the situation, you often have to collect it from a variety of sources [8].

Level of detail/conciseness – Information should be in a form that is short enough to allow for its examination and use. There should be no extraneous information. Clearly there is a trade-off between level of detail and conciseness.

The presentation of information is important to the user. Information can be more easily assimilated if it is aesthetically pleasing.

Value of information – The relative importance of information for decisionmaking can increase or decrease its value to an organization. Validity refers to whether the data actually represent what you think is being measured. Validity encompasses the entire experimental concept and establishes whether the results obtained meet all of the requirements of the scientific research method [18].

The above properties are general properties. There are also information properties that belong to the group of quality properties. They are: purposefulness, effectiveness, fixity, invariance, frailty, broadcast, reproducibility, multiplicativity, variability, multipotency. There are also special properties: adequacy, pithiness, sufficiency, stability, topicality, targeting, nonadditivity, noncommutativity, nonassociativity, concentrations and performance. Information also should be available within set cost levels that may vary dependent on situation. If costs are too high to obtain information an organization may decide to seek slightly less comprehensive information elsewhere.

For the improving the quality of administration in the state power system is important to assess information that public servants use for the decision making. They can use ABC-analysis for assessment of information quality. ABC analysis is an inventory categorization method which consists in dividing items into three categories (A, B, C): A being the most valuable items, C being the least valuable ones. This method aims to draw managers' attention on the critical few (A-items) not on the trivial many (C-items). This method use The Pareto principle: 20% of population owns 80% of nation's wealth; 20% of employees cause 80% of problems; 20% of items accounts for 80% of firm's expenditure. The ABC approach states that a company should rate items from A to C, basing its ratings on the following rules: A-items are goods which annual consumption value is the highest; the top 70-80% of the annual consumption value of the company typically accounts for only 10-20% of total inventory items; B-items are the interclass items, with a medium consumption value; those 15-25% of annual consumption value typically accounts for 30% of total inventory items; C-items are, on the contrary, items with the lowest consumption value; the lower 5% of the annual consumption value typically accounts for 50% of total inventory items.

Steps for the classification of information attributes are: 1) find out the result of the evaluation of attribute of information in points; 2) list out all the attributes and arrange them in the descending value; 3) accumulate value and add up number of points and calculate percentage on total inventory in value and in number; 4) draw a curve of percentage items and percentage value; 5) mark off from the curve the rational limits of A, B and C categories.

Research of information quality was done in Chernihiv regional state administration. The totality of the properties has been divided into three groups: Group A, which is 20% of the most influential properties; Group B - 30% less influential; Group C - 50% of properties which are less important. The analysis was conducted using expert methods, where each of the experts was evaluated each property. Next by average estimates of each property was conducted ranking of results. As experts were involved public servants. Studies show the Group A includes properties: presentation of information, timeliness, accuracy, relevance, adequacy, effectiveness. The group B includes pithiness, purposefulness, targeting, level of detail, reliability, availability, performance, sufficiency, completeness. The group C includes properties: fixity, invariance, frailty, broadcast, reproducibility, multiplicativity, variability, multipotency, stability, topicality, nonadditivity, noncommutativity, nonassociativity, concentrations.

The most common sources of information in public administration are: national level of government administration, local level of government administration, legislation governance, appeals and results of control in public administration, problem and emergencies. ABC-analysis allows determine properties specific to each source of information. The research results are shown in Table 3.1.

Table 3.1

N⁰	Information Sources	Properties
п/п		
1.	National level of government	accuracy, relevance, effectiveness
	administration	
2.	The local level of government	presentation of information,
	administration	adequacy, accuracy
3.	Legislation governance	effectiveness, relevance timeliness
4.	Appeals	relevance, effectiveness, adequacy
5.	Results of control in public	accuracy, timeliness, relevance and
	administration	adequacy
6.	Problem and emergencies	adequacy, relevance

Information sources and properties of information

Studying the properties of information shows that information for effective decision-making in public administration must to have properties such as: accuracy, relevance, effectiveness, presentation of information, adequacy and timeliness. Based on the analysis of quantitative and qualitative characteristics of information in the executive branch may be proposed definition of information in public administration, as a documented information on events and phenomena in the society, the state, the natural environment that meets the requirements of accuracy, relevance, effectiveness, presentation of information, adequacy, timeliness and selected to provide state-management functions.

Information communication technologies allow public service to become cheaper, faster and more democratic. Information system means by which people and organizations utilize technologies, collect, store use and distribute information. Good information system is used to provide important information for decision making. The information technology may be used for the processing, storing or distribution of data. Data as a row material for the production of information and information as a result of this production must be qualitative. Quality management system provides a best solution for automating decision-making process. It provides a solution for identifying corrective actions, issuing risk assessments and identifying risks. Quality Management System establishes a vision for the public servants, sets standards, builds motivation, sets goals for employees, helps fight the resistance to change within organizations and helps direct the corporate culture.

We can use different methods to assess the quality data and information. One of the most effective methods is an assessment of information attributes. The proposed method of ABS-analysis allows determine the most important properties of information. These properties can be studied also with respect to different sources of information. The results of analysis will help to evaluate the information obtained to make decisions and select the most important and necessary information. Ultimately such analysis allows improving the quality of management decisions.

## References

- [1] Бутко М.П., Дітковська М.Ю. Формування інформаційного забезпечення в системі державного управління: моногр. Ніжин: ТОВ «Видавництво «Аспект-Поліграф», 2010. 244 с.
- [2] Закон України "Про електронні документи та електронний документообіг" № 851–IV від 22.05.2003 р. // Відомості Верховної Ради України. 2003. № 36. С. 275–281.
- [3] Закон України "Про інформацію" N 2657-XII від 02.10.1992 р. // Відомості Верховної Ради України. 1992. N 48. С. 650-669
- [4] Закон України "Про науково-технічну інформацію" № 3322–ХІІ від 25.06.1993 р. // Відомості Верховної Ради України. – 1993. – № 33. – С.345 – 355.
- [5] Олійченко І.М. Розвиток інформаційного забезпечення органів державного управління: теорія, методологія, практика: монографія / І.М. Олійченко. – Ніжин: ТОВ "Видавництво "Аспект-Поліграф", 2010. – 432 с.
- [6] Проект Закону про внесення змін до Конституції України (щодо децентралізації влади) № 2217а від 01.07.2015. Режим доступу http://w1.c1.rada.gov.ua/pls/zweb2/ webproc4\_1? pf3511=55812
- [7] Розпорядження Кабінету Міністрів України "Про схвалення Концепції розвитку електронного урядування в Україні" N 2250-р, 13.12.2010 р.
- [8] Applied Research and Methods: Assessing the Reliability of Computer-Processed Data (GAO-09-680G) (July 1, 2009), at 4. Government Accountability Office, http://www.gao.gov/
- [9] Cloud Service Level Agreement Standardisation Guidelines, at 15. Ec.europa.eu/information\_society/newsroom/cf/dae/document.cfm?action=display&doc \_id=6138
- [10] DM3595-001, at 29. http://www.ocio.usda.gov/sites/default/files/docs/2012/DM3595-001.pdf
- [11] Effy Oz Management Information Systems. (6th ed). Boston: Course Technology. 2009
- [12] Georeferencing: The Geographic Associations of Information (2006) Glossary, at 242-43.
- [13] Guide to Conducting Privacy Impact Assessments for State, Local, and Tribal Justice Entities,2012 at 38.https://it.ojp.gov/gist/47 File/ Guide to Conducting Privacy Impact Assessments\_compliant. pdf
- [14] International standard ISO 18091:2014 "Quality management systems Guidelines for the application of ISO 9001:2008 in local government" First edition 2014-02-15.
- [15] Marakas G., O'Brien J. "Introduction to Information Systems" McGraw-Hil. (16th Ed)., 2012 – 768 p.
- [16] Meier A. eDemocracy & eGovernment Stages of a Democratic Knowledge Society Translated by Wiltrud Henkel - Springer-Verlag Berlin Heidelberg 2012
- [17] National Telecomm. Info. Sys. Security Instructions (NSTISSI) 4009; NIST Special Publication 800-53; FIPS 200; FIPS 199. See also 44 U.S.C. §3542 ("Ensuring timely and reliable access to and use of information").
- [18] Privacy, Civil Rights, and Civil Liberties Compliance Verification for the Intelligence Enterprise, 2010 App. B, at 42. https://www.ncirc.gov/documents/public/ supplementaries/ privacy\_verification.pdf
- [19] SAGA Standards and Architectures for eGovernment Applications Version 4.0 Published by the Federal Ministry of the Interior, Germany, March 2008
- [20] The Global Information Technology Report 2015, ICTs for Inclusive Growth // Committed to improving the state of the world, World economic forum, 2015 357 c.
- [21] U.S. Census Bureau, Glossary http://www.census.gov/glossary/

# **3.2 Development of information systems in public administration as** component of e-governance

Public administration system uses information as a resource for making effective management decisions. Providing required information resources for information systems that use advanced technology can significantly accelerate management processes and ensure high quality of decisions. Information systems provide great opportunities for increasing the productivity of information processing. However they are often not used in full, that requiring more research in this area. One of these problems is to improve the functioning of the public administration through the use of qualitative information resource and modern technologies of information processing.

Information is one of the most important resources in public administration. Information is generated through the transformation of data. In information system a clear distinction is made between data and information. Data are used for the production of information. Data is a raw fact and can take the form of a number or statement such as a date or a measurement. It is necessary for public administration to put in place procedures to ensure data are recorded. A common definition of information is that it is data that have been processed so that they are meaningful [11]. This requires a process that is used to produce information which involves collecting data and then subjecting them to a transformation as a raw material for information mainly used already processed data. These data are the information resources for further processing. The processed information is used to make decisions. Decision making in public administration is a process by which public servants respond to opportunities and threats by analyzing options, and making decisions about goals and courses of action. [7]

Law of Ukraine "On the National Informatization Program" defines information resource as a set of documents in information systems (libraries, archives, databanks, etc.). It defines information product (products) as the documentary information prepared and intended for requirements satisfaction of users. The main types of information resources that established by law in our country defined in the law of Ukraine "On information". As to the content the information shall be split as information: on physical person; as reference and encyclopedia information; on environment (ecological information); on goods (works, services); science and technology information; tax information; legal; statistics; sociological; other types of information.

Information on physical person – ID (Identification data) data, other information or information pool about a physical person. It is not allowed to compile, store, use and disseminate the confidential information about the person without his agreement, except the law specified cases, and only in the national interests, economic welfare and human rights defense. Confidential personal ID information is: nationality, education, marital status, faith, health, address, DOB (Date of birth), POB (place of birth). Everyone has a free access to personal info except the cases set by law.

Reference and encyclopedia information – systematized, documented promulgated or otherwise disseminated information about society, social being and environment. Key sources of reference and encyclopedia information are: encyclopedias, dictionaries, guides, ad notes and advertisements, maps, e-databases and data pools, archives of information services, networks and systems, as well as certificates issued by authorized organs and self-governance, citizen associations, organizations, their staff and automated information and telecom systems. Legal regime of reference and encyclopedia information shall be specified by the laws of Ukraine and international treaties/agreements.

Information on environment (ecology info) – info/data on: environment status and its components, including genetically modified organisms and interaction between these components; factors that affect or may environment components (substances, energy, noise, radiation, as well as activities or events, including administrative, agreements on environment, policies, legislation, plans and programs); status of health and personal security, living conditions, status of

objects of culture and constructions to a degree they may be affected by environment components.

Legal regime of the information on environment (ecological information) shall be specified by the law of Ukraine and international treaties/agreements. The information on environment, except the information about the location of military facilities, may not be classified as information with limited access.

Information on goods (works, services) – info/data about quantitative, qualitative and other characteristics of goods (works, services). The information about effect of a good (services, works) on life and health of people may not be classified as information with limited access. Legal regime of the information on goods (works, services) shall be specified by the laws of Ukraine and international treaties/agreements.

Science and technology information – any information and/or data about domestic and foreign achievements in science, technology and manufacturing obtained in the course of science and research, development, design and technology, production and public activities that can be recorded on material media or retrieved electronically. Legal regime of science and technology information, shall be specified by the law On Science and technology information, other laws international treaties/agreements. Science and technology information is open for access if it is not stipulated otherwise by Ukraine laws.

Tax information – data pool created and obtained by the parties to information relations in the line of duty and necessary for control organs to perform under the Tax Code of Ukraine. The legal regime of the tax information shall be specified by the TCU and other laws.

Legal information is any information on law, legal system, sources, implementation, legal facts, legal relations, legal order, torts, counter measures and prevention thereof. Sources of legal information are the Constitution of Ukraine, other laws and bylaws, international treaties/agreements, international law norms and principles, legal acts, media publications, public speeches, other sources of information on legal matters. To ensure physical/legal persons' access to

legislation and other normative acts the state shall ensure the publication thereof in mass print runs shortly after their enactment.

Statistics information – documented information that provides quantitative characteristics of mass events/processes that occur in the economic, social, cultural and other spheres of life. Official state statistics (OSS) information is subject to systemic promulgation. The state guarantees that parties to information relations have an open access to OSS, save the information with limited access as stipulated by law. The legal regime of the state statistics info shall be specified by the law On SS, other laws international treaties/agreements.

Sociological information – any documented information about the attitude towards some persons, developments, events, processes, facts, etc. Legal regime of sociological information shall be specified by the laws of Ukraine and international treaties/agreements.

There is a relationship between the concepts of information support, information resources and information. Information resources are the subject of work being done in the administration system. Information is seen as the product of the work. Information support includes information resources, information and methods of information base. They are: classification and coding of information, methods of referenced data, creating databases and databanks. However, this approach to the definition of an information resource concerns the information base of automated information systems and ignores the fact that in addition to it there are other sources of information used in the administration system in decision-making. This is the information carriers which are the staff working in the organization and means that are not used by the information system. For example, material objects used as examples to provide more information than what is in the documents, photographs, drawings, etc.

The system of public administration uses different kinds of information. Therefore it is reasonable to believe that all kinds of information are "information resources". Information resources have all users who are in the structure of public administration agencies. Each department of the public administration agency uses several types of information from different sources. Information is provided from global information systems, public information resources, industry, associations, organizations belonging to the sphere of influence of the public administration, information resources individual professionals. Informational resources should also include archival information that has lost its relevance, but can be used to analyze trends that occur in the processes taking place in the public administration. The System of public administration uses various types of information carriers. The most important of them are paper and electronic carriers.

The suppliers of information resources in public administration are: global, regional, corporate information networks; central government; local governments; civil servants; associations, enterprises and organizations; political formations; social community; citizens. Document is the most common form of information resource in public administration. It may be paper or electronic. Also, information is stored in the form of facts related to the special structure in the information system. Another form is the memory of people. The man is a source of expert and professional information, which is used for decision making. Therefore, for the public administration is offered as information resources consider the following types: documents, facts, people and special kinds of information resources.

Generalized scheme of the information process in public administration agency is shown in Figure 3.2. The scheme reflects procedures in the automated system that provides information for decision making.

Information system collects information from the external and internal environment and generates an information resource. The information comes in the form of documents and facts which are selected according to the criteria of representativeness, accuracy, timeliness, relevance, adequacy, effectiveness. Selected information is used to create information resources. These operations make personnel of information department. Resources are used for the decision making. The Decision Making process includes the stages of analysis, generate alternatives, selection criteria, assess alternatives, choose among alternatives and implement the chosen alternative. The stages of generating alternatives and of

choosing selection criteria are performed by specialists of the functional departments. Information after processing by specialists in the form of alternatives and necessary additional information comes to administrator who makes decisions.

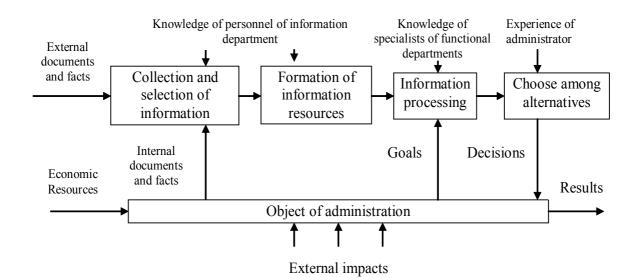


Fig. 3.2 Scheme of the information process in public administration agency

Based on preliminary analysis we can suggest definition of information resource in government administration and the principles of its formation. Information resource in government administration is an aggregate of documents, facts, knowledge, special kinds of information in information systems of public authorities, which are available for immediate use and are lawfully collected for the purpose of government administration.

To ensure effective functioning of information systems in public administration is necessary to ensure the compliance of a number of principles in forming an information resource:

- the selection principle information resource should be formed according to the criteria of representativeness, accuracy, timeliness, relevance, adequacy and effectiveness of information,
- principle of development the information resource must improve in accordance with the requirements of government administration,

- the principle of permanent increasing information resource must fill up the necessary information base for solving new administration problems,
- the principle of activeness insufficiency of information and emergence of contradictions leads to the need of the development of resource,
- principle of integration the need of consolidation individual components of an information resource into a single system that provides their interrelated and interdependent interaction,
- the principle of disposable input and multiple uses the inputting of information must be complete and sufficient for its use to all users who have the correct access rights,
- principle of security the presence of different levels of protection and access to information,
- the principle of flexibility possibility to respond to changes in the environment and adapt to them,
- the principle of interaction with other resource information systems,
- the principle of decentralization of structure information resource through the use technology of distribution information is necessary bring closer the information resources unto the places of their using.

Information resources provide processes in information systems of government that produce information for administrators, decision makers. Condition of this resource is one of the most important factors that affect the efficiency of public administration.

One of the general trends of society and state development is transfer to informational society based on wide implementation of informationcommunication technologies (ICT) in all man activity ranges. Among plurals of modern ICT, that determines this progress, the particular place is taken by the "electronic document" technology [10]. An electronic document is any electronic media content that is intended to be used in either an electronic form or as printed output. Information recorded in a manner that requires a computer or other electronic device to display, interpret, and process it. This includes documents (whether text, graphics, or spreadsheets) generated by a software and stored on magnetic media (disks) or optical media (CDs, DVDs), as well as electronic mail and documents transmitted in electronic data interchange (EDI) [6]. Electronic Document Management system is used for tracking, managing and storing documents. EDM (Electronic Document Management) is the management of different kinds of documents in an organization using computer programs and storage. An EDM system allows an organization and its users to create a document or capture a hard copy in electronic form, store, edit, print, process, and otherwise manage documents in image, video, and audio, as well as in text form. An EDM system usually provides a single view of multiple databases and may include scanners for document capture, printers for creating hard copy, storage devices such as redundant array of independent disks systems, and computer server and server programs for managing the databases that contains the documents.

EDM may be needed in organizations that capture and store a large number of documents. EDM may be combined with or integrated into other applications. It may be combined with a workflow management approach. Capture may include document imaging and optical character recognition (OCR). In the context of regulatory compliance, Electronic Document Management must address the following: how long documents should be retained; where documents should be stored; how changes to documents can be traced; how documents can be recovered if a disaster should occur.

An Electronic document management software application can be used to create a single view of all an organization's documents and provide workflow tools to monitor and control modifications. In such a system, it's important that document in all formats, including multimedia, are tagged and indexed so they can be found quickly by keyword or full text search.

The implementation of electronic document management in public administration is the first step and foundation of implementing the concept of "electronic government". It will provide an effective document management at all stages of their life cycle - from preparation and registration before issuing resolutions, reports and submitting to the archive. Implementation of an automated process makes it possible to reduce the time to prepare the documents; reduce the movement of documents and increase the efficiency of their performance; identify the responsible for the execution of the document and determine how much time government servant needs to process the document; effectively organize search documents, including if having minimal information about it; generate reports and monitor the movement of documents and workflow management decisions based on the data of the reports; bring the document in line with national standards of Ukraine; collaborate with citizens and third parties on a "one stop shop". Implementing electronic document management provides legal significance of documents using digital signatures. The system also provides data protection.

Electronic Document Management is a form of Database Management System. An Electronic Document Management System (EDMS) - is a system that ensures the orderly creation, access management and dissemination of electronic documents, and provides control over the flow of documents in the organization. Electronic document management systems are meant to provide support throughout the life cycle of a document.

System of Public administration uses information as one of the most important resources. Information system forms an information resource from the external and internal environment. Information resource can be defined as a combination of documents, facts, knowledge, people, and special kinds of information in information systems of public authorities. It is available for immediate use and lawfully collected for the purpose of providing information management. As to the content the information shall be split as information: on physical person; as reference and encyclopedia information; on environment (ecological information); on goods (works, services); science and technology information; tax information; legal; statistics; sociological; other types of information. Defined scientific principles formation of information resources in government administration such as: the selection principle, principle of development, principle of permanent increasing, principle of activeness, principle

of integration and principles of disposable input and multiple uses, security, flexibility, interaction, decentralization.

The information in government agencies is represented in various forms and combination of these forms provides a complete picture of situations and problems. The most important form is document. A document management system is a system used to track, manage and store documents. Performing of all procedures in the implementation of document management system is more effective if we use computer technology. An electronic document management system (EDMS) provides the technology and methods needed to capture, manage, share, and secure information within an organization. Benefits of electronic document management system in government administration: efficiency and productivity in business processes; compliance with regulatory, legal, and quality requirements, consistency and repeatability of business operations, faster process cycle times; elimination of paper-based costs, storage fees, and shipping; improved business continuity planning. Using EDM increases the efficiency of the government administration and ensures high quality of decisions.

According the Constitution of Ukraine the State shall ensure protection of rights, freedoms and legal interests of citizens. Everyone shall have the right to address individual or collective appeals, or to personally recourse to public authorities, local self-government bodies, to officials, and officers of these bodies obliged to consider the appeals, and to provide a substantiated reply within the period determined by law. This right is enshrined in Article 40 of the Constitution. The right for appeal is an important constitutional and legal means of protection, and one of organizational-legal guarantees of the rights and freedoms of citizens. An appeal of citizens is one of the forms of popular participation in governance, the possibility of active influence of the citizen on the activities of state authorities and local self-government. Furthermore appeal is the way to restore the violated rights of the citizen by providing to the government bodies of complaints and motions.

The practical implementation of the right for appeal is governed by the Law of Ukraine "On citizens'appeals". This Law regulates issues on practical exercise by the Ukrainian citizens of their constitutional right to submit to bodies of state power and civic associations, according to their statutes, suggestions regarding improvement of their activity, to reveal their performance drawbacks, to appeal actions of officials, state and civic bodies. This Law sets forth the mechanism for ensuring citizens participation in state administration, solution of issues related to interests of a particular individual or the community as a whole [5].

Ukrainian citizens shall have the right to apply to any bodies of state power, bodies of local self-government, as well as enterprises, institutions, organizations and their officials with appeals on the implementation of their social and economic, political and personal rights and legal interests and a complaint about violation thereof.

Depending on the context, appeals from the citizens are divided into the following categories: solicitations, complaints and proposals. Solicitation is an appeal from a citizen with a request to promote the implementation of his/her civic rights and interests enforced by the Constitution and the current legislation of Ukraine. According to the Law, complaint is an appeal from a citizen with a request to restore his/her rights and protects legal interests violated by actions or decisions of officials. Proposal should be understood as an appeal from a citizen, which provides advice or recommendations for activities of bodies of state power and bodies of local self-government, as well as opinion on regulating social relations and living standards of the citizens.

According to the Law, subject to appeal are decisions or actions of bodies of state power or bodies of local self-government, which results in:

- violating rights and legal interests or freedoms of a citizen,
- establishing barriers for a citizen in implementing their rights and legal interest or freedoms,

 illegally imposing any obligations upon a citizen or illegally bringing them to account.

The Law establishes that citizens can apply both in Ukrainian and in any other language. The body that has been applied to shall reply in the same language.

Appeals appropriately compiled and submitted according to the established procedure are subject to mandatory acceptance and consideration. Written appeals, which do not indicate the place of residence or are not signed by the applicant, as well as those not indicating the authorship, shall be recognized anonymous and are not subject to consideration. Bodies of state power, bodies of local self-government, as well as institutions, enterprises and organizations shall consider appeals objectively and timely, verify the facts presented thereby, pass decisions according to the current legislation and ensure their fulfillment. Appeals shall be considered and solved within the deadline that does not exceed one month from the date when they were submitted; appeals that do not require additional examination shall be considered immediately, but not later than fifteen days after the date when they were submitted.

Appeals are part of the overall documentation, which circulates in the system of government [4]. The structure of incoming mail that came to Chernihiv regional state administration in 2015 shows that Official documents make up 53.3% of the total number of documents, information and other documents – 28.6% and letters of citizens – 18.1%. The largest share in the regional state administration correspondence is the correspondence with ministries and other Central authorities, in second place – correspondence with the Cabinet of Ministers of Ukraine, taking into account the regulations, orders and other documents, which is 17%. In the third place there is a correspondence with district state administrations, which represent 16% of the total incoming flow. The share of documents from regional departments, institutions and organizations is 14%. In General, correspondence with regional Executive

authorities and other state agencies and organizations of the region is 40% and the correspondence with the higher authorities – 54%.

Analysis of outgoing correspondence, which was registered in Chernihiv regional state administration in 2015, is shown in table 3.2.

Table 3.2

## 

Including:	
Orders of the Chairman of regional state administration	1195
Letters	3953
Information and answers to letters:	5264
Responses to applications and complaints of citizens	2264
Telegrams, cards, lists, ballots:	11051
Documents with a signature stamp of chipboard:	129
Responses to inquiries and information	109

The largest number of correspondence - 60% was sent to the district state administrations and Executive committees of the cities of Chernihiv, Nizhyn, Pryluky and to regional Council, regional offices and other structural subdivisions, enterprises, institutions and organizations of the region. This is a proactive sending of administration instructions to the lower structural units. Proactive correspondence with higher authorities is 40%. Among them, the largest volume of correspondence sent to ministries, government departments and other Central authorities. This is due to the fact that the regional state administration directs requests for explanation and clarification of activities of relevant bodies. Correspondence with the Cabinet of Ministers of Ukraine is 7% of correspondence regarding orders.

The analysis of correspondents who received responses in 2015 shows that the highest number of them - 53% are ministries, government agencies and

other Central agencies. This suggests that incoming correspondence with these bodies is on the first place, therefore for regional state administration is necessary to send responses to these letters, orders, and requests.

Second place is shared by the Administration of the President of Ukraine and the Cabinet of Ministers of Ukraine, correspondence with these bodies is 20% of the total number of correspondence. This is also consistent with the fact that incoming correspondence from the Cabinet of Ministers of Ukraine is 17%, and from the Secretariat of the President of Ukraine – 6%. It should be noted that the largest number of responses to the letters were sent to the higher authorities. In relation to proactive correspondence most of the letters were sent to the regional structures. This corresponds to the logic of subordination and hierarchy of authorities. In the General structure of outgoing correspondence, registered in Chernihiv regional state administration, the most numerous are telegrams, postcards, lists, bulletins – 46.11%. Information and responses to emails are 21.97%, responses to requests and complaints of citizens are 9.45%, the proactive correspondence – 16.5%.

According to the Law of Ukraine "On citizens'appeals" the Chairman of regional state administration and his deputies conduct personal reception of citizens on schedule, which is posted in the regional state administration. Citizens can also contact the administration in writing. In the apparatus of the Chernihiv regional state administration created a Department on work with references of citizens, which is its structural division and is accountable to the Deputy Chairman who is the chief of apparatus. The main tasks of the Department is the organization of personal reception of citizens, ensuring the consideration of written complaints received in the regional state administration, control over the solution to the issues raised, a summary and analysis of the proposals contained in them, to develop proposals aimed at elimination of the reasons generating justified complaints and comments of citizens, rendering of methodical and practical assistance of the district state administrations, local self-government bodies, structural subdivisions of regional state administration,

territorial units of Central Executive bodies, enterprises, institutions and organizations irrespective of forms of ownership on questions of work with appeals of citizens [1].

The numbers of written and personal appeals to the regional state administration are shown in Figure 3.3.

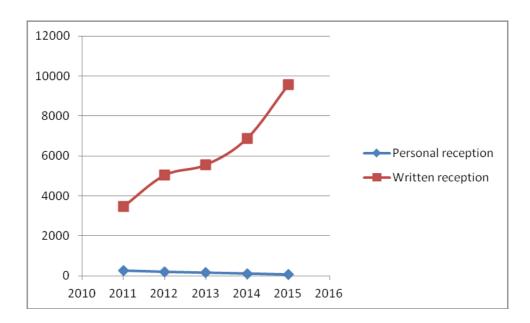


Fig. 3.3 Dynamics of citizens 'appeals for the period of 2011-2015

The analysis shows that over the past five years, the number of written appeals of citizens tends to increase, and the number of citizens who turned a personal appointment - to decrease. This is due to factors such as the political situation in the country, the demographic situation in the region and administrative and territorial structure. For example, the largest number of appeals was received in 2015, when the country was at a new stage of redistribution of power between political forces. Another reason for change in the number of written complaints was the beginning of work of the governmental hot line "Social contact center". Many citizens began to turn directly to the website of the Cabinet of Ministers. Next problem is that the average age of the population of the region is quite high, so the majority of citizens who apply to the regional state administration – pensioners and the elderly. This encourages them to apply in writing, not to come on reception to the regional state administration. The analysis shows that about 31% of citizens 'appeals to regional state administration are from the citizens of Chernigov and 69% from citizens living in the region. And Vice versa almost 57% personal citizens 'appeals are from citizens of Chernihiv and 43% from the citizens of region.

For the purpose of improvement of work with appeals of citizens, enterprises, institutions, organizations, physical persons-entrepreneurs, bodies of local self-government by the Cabinet of Ministers of Ukraine of 09.06.2011 № 589-p approved the Concept of creation of National system of processing of addresses to Executive bodies. In the framework of this system based on state institutions "Government contact center" are merged existing telephone hotlines, help telephone services of Executive authorities and centers that created in the Autonomous Republic of Crimea, oblasts, cities of Kyiv and Sevastopol. For this purpose it is necessary to establish regional contact centers, public institutions and to ensure their interaction with state institution "Government Contact Centre". To ensure the implementation of this Concept by the Cabinet of Ministers of Ukraine of 18 January 2012 No. 21 approved the Regulation on the National system of processing of appeals to the Executive authorities and Typical regulations of the contact center of the Autonomous Republic of Crimea, regions, cities Kiev and Sevastopol [3].

The regional contact center is a budgetary institution, which belongs to the sphere of management of regional state administration and is the subject of the National system of processing of appeals to Executive bodies. The main task of the contact center is to ensure prompt consideration of the Executive authorities of the complaints filed by citizens, enterprises, institutions and organizations, physical persons – entrepreneurs, local governments according to a single phone number and via the Internet. The application of information systems related to network technologies increases efficiency of interaction between citizens and power. These models of interaction such as C2G (citizento-government) and G2C (government-to-citizen), allow significantly improve the dialogue between the authorities and citizens [2].

Chernihiv regional state administration should develop infrastructure of the contact center pursuant to the letter of the state institution "Government Contact Centre", dated on 11 April 2012 as No. 2237. To solve this problem is proposed to create a number of subsystems, namely: subsystem for processing the call queue; call registration subsystem; processing subsystem requests; the subsystem of the analysis of complaints; subsystem integration; a subsystem of the web external user access.

Processing subsystem the call queue is responsible for automatic distribution of phone calls between the operators of the contact center and has the following functions: setting and selection of various algorithms for call distribution; distribution of calls on the selected algorithms; establishment of the incoming call in the queue in which the call is to release the operator. The registration subsystem is intended for audio recording of conversations that take place in the contact center and has the following functions: audio recording of conversations that take place during the work shifts; prompt the administrator connection to the current conversation of the operator; saving the call information in a database; the ability to find and listen to the audio recording of the conversation.

Subsystem processing enables the registration and processing of applicants and has the following functions: registration of applicants; monitoring the consideration and execution of requests; the preservation of the history of consideration of applications and interaction with applicants; search for questions in the knowledge base by category and key words to improve the quality of service of the applicants. The subsystem of the analysis of complaints provides search and aggregation of information accumulated in the database system, and formation of analytical documents: reports and maps. Data on which the subsystem enables the analysis of the distribution of references by

topics, regions, bodies of Executive power, the urgency of the issues, consideration of appeals of the Executive discipline of the Executive authorities.

Subsystem integration enables communication regional contact Centre with the Government contact Centre via a secure communication channels according to certain rules, mechanisms and exchange format. Subsystem web access external users of the system provides receiving and processing of applications submitted by the experts of the contact center to staff of the relevant Ministry or Executive body.

For the implementation of e-governance it is necessary to determine approaches to e-government systems responsibilities. There are three possible approaches to e-government responsibilities: Centralized when decisions are taken at the most senior or central level; Decentralized when decisions are taken at some level lower than the most senior; typically by individual work units within the organization or even by individual staff. The latter may also be referred to as end-user computing, where the individuals within the public sector who make use of outputs from e-government systems (the internal end users) are also those who operate and/or develop and/or manage those systems; Hybrid -Decisions are taken at both senior and lower levels, either separately or in an integrated manner [8].

Potential benefits of a centralized approach are: achievement of scale economies – centralized approaches allows most activities to be undertaken more cheaply per unit; avoidance of duplication – one main intention of centralized approaches is to have a single version of any particular egovernment system for the whole organization, and to store any item of data once and only once, sharing resources – a well-planned centralized system holds data used across the organization in one place, allowing all staff to access it.

Potential disadvantages of centralized approaches: heavy time consumption – centralized decisions and actions can be more time-consuming than for a decentralized approach; limited ability to meet user needs - centralized approaches necessarily mean that priority goes to those e-government systems which are seen as important by some select and centralized staff group; inflexibility – the greater the amount of central planning that has gone into an e-government system decision, and the longer that decision is therefore intended to provide guidance for the organization, the less flexibility it offers the organization to cope with differences between local units, or with internal or external changes.

Potential benefits of a decentralized approach: greater fit between systems and local needs – the closer the proximity of user and developer, the less the communication gap and the more likely it is that the developed system meets the users' real needs; faster system development – the less the organizational distance between system user and system developer, the faster development of that system is likely to be; perceived lower costs – the costs of decentralized approaches are greater because of many initially unrecognized indirect costs.

Potential disadvantages of a secentralized approach: barriers to sharing data – decentralized approaches can create e-government systems in different work units that are mutually incompatible; barriers to sharing other resources, including human resources – there may also be an inability to share other resources if work units are allowed to set up their own separate e-government systems; duplication of effort – decentralized approaches also tend to be very costly because units will often duplicate what others are doing; lack of learning and control – in addition to the extra direct costs that duplication imposes, there is an indirect cost of lost learning opportunities and limited cross-fertilization of ideas; failure to achieve scale economies – decentralized approaches make many e-government-related activities more costly, from buying computers, to gathering data, to training staff, to system operation and maintenance; summary of problems – all of these problems can be largely summarized as: higher-than-desirable costs and/or a lower-than-desirable scope of public sector activities.

Analysis of centralized and decentralized approaches shows that in the conditions of decentralization of power in Ukraine needs to maintain a balance between centralization and decentralization of governance. Therefore, the most

appropriate is a Hybrid approach to e-government systems responsibilities. Hybrid Approach Content: the most common hybrid computing architecture is the client/server model, in which computing power is divided between the central servers and the local client workstations; a hybrid approach to systems development can involve a division of responsibilities, for example, defining certain types of e-government system as suitable for central development, and others as suitable for decentralized/end-user development; standards for procurement bring many immediate and obvious benefits to public agencies; a common hybrid approach is to centralize the planning of training for core egovernment systems. Other training needs may be met, as requested, by end-user support centers or by informal training methods. There may also be central provision of access to open and flexible learning systems such as CD-ROM- or Internet- or intranet based training packages [12].

For the successful implementation of e-governance is necessary to use the Customer Centric e-Government System. Such system provides services through delivery channels to customers and to be operated by internal users (designated functionaries for processing) of the system, whenever required. The customers could be citizen, employees, government users, business users, etc. The following system characteristics considered for study of customer centric e-Government system: system consists of Hierarchical structure of functions, processes and activities; functions are the functional requirements of system envisaged; processes embed the procedures of government; activities contain the actions to be performed based on policies/rules/acts; external users (customers) request the system for services like information, certificates, licenses, permits, payment of taxes/fees; requests are processing; responses generated as outcomes for customer requests are delivered [9].

Electronic government refers to the utilization of information technology, information and communication technologies, and other web-based telecommunication technologies to improve and/or enhance on the efficiency

and effectiveness of service delivery in the public sector. One of the most important constituents of e-Governance is the model G2C that refers to relations government bodies with the citizens. The goal of Government to Customer (G2C) e-Governance is to offer a variety of ICT services to citizens in an efficient and economical manner, and to strengthen the relationship between government and citizens using technology. The using of this model ensures citizens participation in state administration, solution of issues related to interests of a particular individual or the community as a whole. The introduction of the unified electronic system "appeals of citizens", implemented through various instruments, such as the establishment of regional contact centers appeals to the Executive authorities. They should be considered as a component of the e-Government of bodies of Executive power and provide appropriate mechanisms for the integration. The creation of the National system of processing of appeals to the Executive authorities at the local level, as a Customer Centric e-Government System, will allow to implement a mechanism for electronic governance in the work of Executive bodies with the public; to ensure responsiveness to issues raised in the appeals of members of the public; to improve the efficiency of public administration.

### References

- [1] Бутко М.П., Дітковська М.Ю. Формування інформаційного забезпечення в системі державного управління: моногр. Ніжин: ТОВ «Видавництво «Аспект-Поліграф», 2010. 244 с.
- [2] Олійченко І.М. Розвиток інформаційного забезпечення органів державного управління: теорія, методологія, практика: монографія / І.М. Олійченко. Ніжин: ТОВ "Видавництво "Аспект-Поліграф", 2010. 432 с.
- [3] Розпорядження Кабінету Міністрів України "Про схвалення Концепції створення Національної системи опрацювання звернень до органів виконавчої влади". N 589р від 9.06.2011 р
- [4] Закон України "Про інформацію" N 2657-XII від 02.10.1992 р. // Відомості Верховної Ради України. 1992. N 48. С. 650-669
- [5] Закон України "Про звернення громадян" N 393/96-ВР від 02.10.1996 р. // Відомості Верховної Ради України. - 1996, N 47, ст.256
- [6] Business Dictionary: http://www.businessdictionary.com/definition/electronicdocument.html#ixzz3YXZsPamn
- [7] Hardcastle E. Business Information Systems 2011 bookboon.com

- [8] Heeks R. Implementing and Managing eGovernment London, Thousand Oaks, New Delhi: SAGE Publications, 2006 304 p.
- [9] Meier A. eDemocracy & eGovernment. Stages of a Democratic Knowledge Society -Springer Heidelberg Dordrecht London New York, 2012 – 235 p.
- [10] Myshchyshyn V. and Zhezhnych P. Analysis of the construction of e-government in Ukraine // Visnyk of Information Systems and Networks v.699 pp.116-127, 2011
- [11]Oz E. and Jones A. Management Information Systems © Cengage Learning 2008
- [12] Ramani. S and Y. S. Kumaraswamy Event Driven Architectural Style for Customer Centric eGovernment System // International Journal of Software Engineering and Its Applications Vol.8, No.6 (2014), pp.67-84.

### CHAPTER 4 INTERNATIONAL EXPERIENCE AND COOPERATION AS A VECTOR REFERENCE POINT FOR THE DEVELOPMENT OF THE PUBLIC MANAGEMENT SYSTEM

#### 4.1 The foreign experience of public-private partnership in agriculture

The economic systems of most countries in the current development are not purely market, but mixed economy with the dominant role of private enterprise interaction with the public sector, and in some countries are very different degrees and forms of government intervention in private business. Development of PPPs relations in many countries are based on the formation of a new institutional structure of the economy and make significant changes in the relations between the state and business in the context of the liberal-conservative doctrine. Changes occur in the direction of correcting the proportions of national income distribution in favor of profits and businesses by eliminating barriers to the integration of business. Review the experience of foreign countries with the implementation and development of relations between the PPP in order to stimulate development of agriculture allows identifation of the promising areas of forms and mechanisms of their implementation in the interests of the state and the private sector. Many countries around the world to solve the problem of providing the population of their states create modern agricultural food businesses based on the principles of public-private partnerships.

There is no one widely accepted definition of public-private partnerships (PPP). The PPP Knowledge Lab defines a PPP as "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance".[14] PPPs typically do not include service contracts or turnkey construction contracts, which are categorized as public procurement projects, or the privatization of utilities with a limited ongoing role for the public sector.

Public-private partnerships have contract periods of 25 to 30 years or longer. Financing comes partly from the private sector but requires payments from the public sector and/or users over the project's lifetime. The private partner participates in designing, completing, implementing and funding the project, while the public partner focuses on defining and monitoring compliance with the objectives. Risks are distributed between the public and private partners according to the ability of each to assess, control and cope with them.

Although public works and services may be paid for through a fee from the public authority's revenue budget, such as with hospital projects, concessions may involve the right to direct users' payments, as with toll highways. In cases such as shadow tolls for highways, payments are based on actual usage of the service. In cases involving wastewater treatment, payment is made with fees collected from users.

Private-sector technology and innovation help provide better public services through improved operational efficiency. The public sector provides incentives for the private sector to deliver projects on time and within budget. In addition, creating economic diversification makes the country more competitive in facilitating its infrastructure base and boosting associated construction, equipment, support services and other businesses.

The private partner faces availability risk if it cannot provide the service promised. For example, the company may not meet safety or other relevant quality standards when running a prison, hospital or school [8].

Demand risk occurs when there are fewer users than expected for the service or infrastructure, such as toll roads, bridges or tunnels. If the public partner agreed to pay a minimum fee no matter the demand, that partner bears the risk [1].

Pressure to change the standard model of public procurement arose initially from concerns about the level of public debt, which grew rapidly during the macroeconomic dislocation of the 1970s and 1980s. Governments sought to encourage private investment in infrastructure, initially on the basis of accounting fallacies arising from the fact that public accounts did not distinguish between recurrent and capital expenditures.

The idea that private provision of infrastructure represented a way of providing infrastructure at no cost to the public has now been generally abandoned; however, interest in alternatives to the standard model of public procurement persisted. In particular, it has been argued that models involving an enhanced role for the private sector, with a single private-sector organization taking responsibility for most aspects of service provisions for a given project, could yield an improved allocation of risk, while maintaining public accountability for essential aspects of service provision.

Initially, most public–private partnerships were negotiated individually, as one-off deals, and much of this activity began in the early 1990s.

PPPs are organized along a continuum between public and private nodes and needs as they integrate normative, albeit separate and distinct, functions of society – the market and the commons. A common challenge for PPPs is allowing for these fluctuations and reinforcing the intended partnership without diminishing either sector. Multisectoral, or collaborative, partnering is experienced on a continuum of private to public in varying degrees of implementation according to the need, time restraints, and the issue at hand. Even though these partnerships are now common, it is normal for both private and public sectors to be critical of the other's approach and methods. It is at the merger of these sectors that we see how a unified partnership has immediate impact in the development of communities and the provision of public services [15].

The exceptional importance of public-private partnerships as an effective tool for implementing policies for agricultural development is determined by:

- first, the development of agricultural production and infrastructure in the interests and with the active participation of business,
- secondly, increasing the efficiency of state property and budget funds allocated for support agriculture;

 thirdly, incentives to private-sector business development in areas that have the greatest potential for good economic growth. These trends are reflected in their specific cost of a state budget, legislative initiatives and developing strategic programs of public-private partnerships.

It should be noted that the huge capital invested in agriculture is primarily due to accelerating scientific and technological progress. In particular, state support to agricultural r activities in the European Union up to 1053 dollars per hectare.[13]

Global leadership in implementing PPP belongs to UK, USA, France and Germany.

Generally it is advisable the following schemes institutional cooperation in the sphere of relations of the private sector and the state, which significantly differ by the method of forming partnerships and the scale of changes.

For the first scheme the forming of PPP took place by adapting the existing institutional framework with the objectives, priorities and directions of economic policy conditions. The experience of UK, USA, Canada, Japan, Latin America and New Zealand shows the interpenetration of new principles, norms and rules of partnership between the state and private business institutions operating in a changing economic policy of government regulation or in public administration changes.

The second scheme is related to the formation of new institutions that meet the new economic conditions and determine the new location of the state in regulating economic and social relations. This scheme is being implemented in Eastern Europe and the CIS [6].

Despite the conceptual differences between the operation of the above schemes, common features of foreign practices implementation of PPPs in the agricultural sector are developed and streamlined regulatory framework that governs contractual relations in various fields and allowing more fully to take into account the variety of operating conditions in different areas. It should be noted that the legal framework of foreign countries mainly defines PPP as any form of cooperation between government and private business, which aims to implement, as a rule, infrastructure projects. In most European countries there are no specific laws governing the relationship between participants is PPP regulation carried out on the subordinate level. This PPP projects are not initiated in the areas where conditions (legal, organizational, technical, social, economic, etc.) are not formed (fig. 4.1).

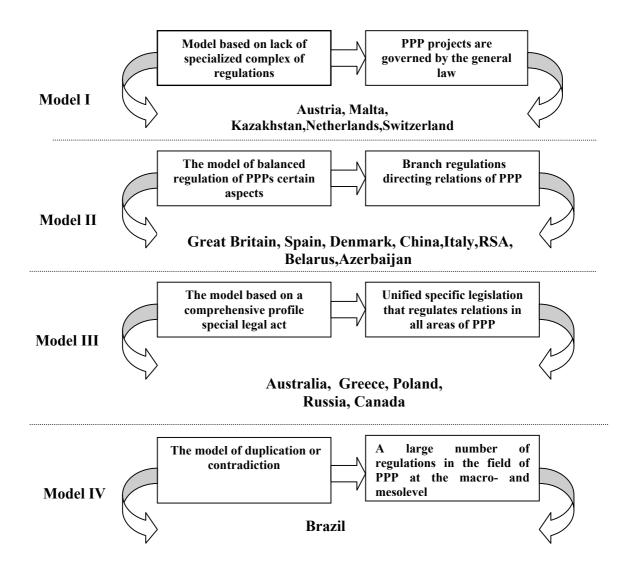


Fig. 4.1 Classification of legal regimes PPP models [2:4]

Let's review the forming of PPPs world experience in the agricultural sector of several countries. It should be noted that the model of public-private partnership and a mechanism of their implementation in each country is formed according to their national circumstances. The difference also is in the composition and structure of the participants and the nature of relationships that are presented in each partnership model (table 4.1).

The main problem faced by national economies of many countries in the process of establishing relations of public-private partnership is to coordinate contradictions and public sector business and minimize the risks of each party PPP project. Often, in order to minimize risks in the implementation of PPP projects, the following forms of state support as government guarantees and direct contingencies (budget subsidies) are used, which are based on the payment of certain sums from the state in cases stipulated by the agreement. This is especially up-to-date for small business relationships and states that play an important role in developed countries. As the experience of leading countries points in order to encourage partnerships in agriculture only institutional changes in the public sector are insufficient. Equally important is increasing social capital system according to the perspective of integration structures in agriculture. According to researches the social capital includes the ability of individuals to form a relationship of trust, cooperation and common purpose. Therefore, it is closely linked with cooperative and interactive relationships that are fundamental for the effective functioning of the integration of businesses on the basis of PPP [15]. Social capital as a factor of partnership promotes the formation of new groups, strengthening confidence in networks and information flows, organizational culture changes. The greatest development of cooperative relations is in Denmark, Norway, Sweden and Finland. The system based on the joint activities of cooperatives and corporations is reflected in the functioning of agriculture business in France and Japan [13].

According to research by L. Moldovans in the United States, Canada, European countries, big business is not permitted directly to agricultural activity. It can invest only in terms of partnership with farmers, though, such as the US and Canada system of vertical integration in the form of industrial and trade corporations are dominant in the food market [4].

### International experience of PPPs formation in the agricultural sector

Country	Directions PPPs in agriculture
USA	The US government and the cooperation of private business particularly widespread and has considerable support at the municipal level state hierarchy. The authorities did not actually take part in the investment programs of agriculture, private investors have very high activity. Significant widespread agro-industrial clusters (wine cluster in southern Washington, a cluster of food in Southeast Ohio Cheese cluster in Vermont, poultry biotech cluster). In 2007 the Programme introduced an innovative partnership in the agriculture technologies that formed around existing programs and technology transfer implemented Agricultural Research Service.
Great Britain	The appropriate legislation is absent that restricts the department or public body in matters of contracts. Compensation costs of the private investor are connected with the proceeds from the operation, or with payments from the budget. The most common forms of PPP are concession and agreements .
Canada	The latest trend in this country is the formation of clusters that combine traditional agriculture structures with companies that specialize in tourism, information and communication technologies, the production of renewable energy, nanotechnology and more. Today eleven structures operates, including: biopharmaceutical cluster in Montreal; agricultural biotechnology cluster in Saskatoon; Farm Tourism Cluster of Alberta; Natural healing technology cluster in Ontario and others. At the state level provides support such initiatives: the creation of specialized research infrastructure, providing highly qualified personnel, organizational support for the creation of new companies and their expansion,
Australia	Focusing on innovative development of agribusiness. Support scientific research by providing competitive grants and tax incentives. Development and implementation of programs to promote multinational companies in the establishment of research facilities.
India	Public-private partnership is seen as an effective tool to accumulation of significant investment flows in terms of implementation of large and long-term projects aimed at reforming and agriculture development by upgrading transport and logistics infrastructure and support education. Much attention is paid to supporting the introduction of scientific innovation, research in the field of botany and genetics, modernization of irrigation systems.
Russia	The agriculture is one of five areas in which the largest number of investment projects based on PPP are realized. (industry, housing, road construction, development of territories). An active role in this process is played by the regional and municipal authorities, their goal - a joint activity with business to attract extra-budgetary funds for rural infrastructure development, housing, training for the industry. The authorities in the field by combining regional investment programs have the ability to solve the complex several objectives: to develop agricultural production and support the social infrastructure of the village.
Belarus	One of the common forms of cooperation between the state and business in Belarus is a state- private enterprises as joint stock companies engaged in production and economic activity based on the integration of private and public capital. One of the main tasks facing the States to the partnership in the form of a joint venture, is a task to maximize management efficiency total capital of the company in which there is no parallel traditionally mostly isolated operation of public and private property, and their close interaction.Basically, this processing industries with Russian capital.

Compliance with environmental requirements of agricultural production is controlled by codes of proper agricultural practice. For example, the Brazilian government has a policy of nationalization tracts of land and promoting them to farmers, providing soft loans, contributing to the formation of cooperatives, creating infrastructure for public funds and so on. They have to do it under the pressure of social and economic problems caused by long-term exploitation of land by large companies in their interests. The partnership between small businesses and government are often formed in conditions of preferential support. Under this form of partnership guarantees granted to small businesses from different public or private financial institutions, connecting with the implementation of national aid to this group of producers. For example, in the United States in the form of guarantees 10 mln dollars are isolated annually, not to mention other forms of public-private partnerships implementation. The cooperation between the state and small businesses involves the possibility of small enterprises of modern technology, creating new jobs in the agricultural sector, the growth of exports. This model combines the operation of both market and administrative tools. Strengthening administrative controls observed in conditions of the supply and demand for food imbalance [2].

Similar instruments of public-private partnerships are used in Poland, which operates the National fund credit guarantees, which guarantees loans to small and medium sized enterprises, and a network of regional funds to support agricultural regions. Concessional lending is popular in Denmark, especially in supporting of organic agriculture. By the way, the trend of recent years in major EU countries is supporting of organic agriculture. For example, in Austria and Sweden the state centers for farmers producing organic produce are established for certification, marketing and advertising activities [3].

In Latin America, until recently, the main form of cooperation between the state and business in the development of the agricultural production was a large-scale participation of public sector investment in infrastructure projects. Note that all these projects are implemented with the help of the state capital, and by attracting private domestic and foreign capital [11].

The successful experience of many countries confirms the viability and practical value of cluster theory M. Porter, whereby the groups of companies with related industries and institutions that cooperate and complement each other can significantly enhance national and regional competitiveness in the global market [5]. Many empirical researches studies have shown that the

average salary and employment in clustering regions significantly exceed similar performance areas where no such formations. As a result the clustering economy has become a global trend that has gripped developed countries (USA, Canada and Euroepan union), newly industrialized countries (China, India, Mexico, Indonesia) and countries with transition economies (Hungary, Slovenia, Russia, Kazakhstan, etc.) [3].

As specific examples of the successful use of cluster approach to build and enhance potential of agriculture activity are cluster associations in Canada. The latest trend in this country is an active formation of clusters that combine traditional agriculture structures with companies that specialize in tourism, information and communication technologies, the production of renewable energy, nanotechnology and more [3], [10]. The other examples of such agricultural cluster formations are in Poland (Agro-tourism and vegetables), cheese-making clusters in Ecuador, Peru, Mexico, Brazil nut cluster, wine cluster in southern Washington, a cluster of diverse production food in Southeast Ohio, Cheese cluster in Vermont, poultry biotechnology cluster (USA), flower cluster in Holland, oil-seed cluster in Argentina and others [11].

In particular, in the Netherlands, one of the government's program "Vision Logistics" was the project "Clustering in pig" which provides the investment for territorial association of individual family farms with breeding pigs, starting with the development of new breeds of pigs for fattening for industrial processing. The project aims at minimizing logistics transport costs and creating conditions for centralized collection and use of organic fertilizers [7], [12].

Thus, there are several key points that contribute to the development of relations of public-private partnerships in the agricultural sector of foreign countries:

- legal framework and a stable political environment conductive to the formation of a unified strategy of PPP,
- the presence of regulatory authorities, whose sole owner is the state,
   experienced staff which united the working group monitoring the

implementation of PPP projects (eg, National Council for Public-Private Partnerships (USA), PPP Centrum (Czech Republic), Partnerships UK (United Kingdom), Irish Government's Central PPP Unit (Ireland), Canadian Council for Public-Private Partnerships (Canada), Public Private Partnership Approval Committee (India), National Treasury's PPP Unit (South Africa), etc.) [14],

- support stakeholders by taking into account the interests of private sector, finish users, which is achieved by providing an open dialogue between partners,
- careful selection of partners involves the assessment of capacity, performance and time frame, ROI and risks, and takes into account the experience, financial stability, political and legislative assessing or auditing environment,
- a stable state economic policies to encourage private business initiatives and support the application of PPP - subsidies mechanisms, low political and social risks.

So, the public-private partnership always operates within certain legal institutions, rules and regulations.

### References

- Akintoye A. Public-Private Partnerships: Managing Risks and Opportunities [Text] / A. Akintoye, M. Beck, C. Hardcastle. – Oxford, UK; Malden, MA: Blackwell Science, 2003.
- [2] Ball R. The Private Finance Initiative in the UK [Text] / R. Ball, M. Heafey, D. King // Public Management Review. 2007. № 9 (2). Pp. 289–310.
- [3] Blanc-Brude F. Public-Private Partnerships in Europe. An Update. Economic and Financial Report [Electronic resource] / F. Blanc-Brude; European Investment Bank. 2007/03. Available at: http://www.eib.org/attachments/efs/efr\_2007\_v03\_en.pdf.
- [4] Braylovskiy I. A. Analysis of the use of public-private partnership in the SIC [Text] / I. A. Braylovskiy // Vestnik universiteta "Turan". 2014. vol. 4 (56). Pp. 9-15.
- [5] British East India Company [Electronic resource]. Available at: http://studentorgs.vanderbilt.edu/modelun/guides/BritishEastIndiaBackgroundGuide.pdf
- [6] Broadbent J. Public Private Partnerships: An Introduction [Text] / J. Broadbent, R. Laughlin // Accounting, Auditing & Accountability Journal. – 2003. – Vol. 16. – № 3. – Pp. 332–341.

- Bull B. Public-Private Partnerships. The United Nations Experience [Text] / B. Bull // The International Handbook on Public Private Partnerships / [G. A. Hodge, G. Greve & A. E. Boardman (eds.)]. – Cheltenham: Edward Elgar, 2010. – Pp. 479–495.
- [8] Comission of the European Communities. Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions [Electronic resource]. – Available at: http://europa.eu.int/comm/internal-market/publicprocurement/ppp en.htm.
- [9] Developing Public Private Partnerships in New Europe [Electronic resource] / PricewaterhouseCoopers Study. 2004. Available at: http://www.pwc.com/
- [10] Dmytrychenko L. State-private partnership: essence, foreign experience, and mechanism of realization in Ukraine [Text] / L. Dmytrychenko, I. Braylovskyi, K. Millier // Journal of Eastern European and Central Asian research. – 2014. – Vol 1. – No 3. – Pp. 1-7.
- [11] Evans J. Public Private Partnerships: A new Direction in Australia. The Twenty-Seventh Annual AMPLA Conference [Text] / J. Evans. – Adelaide [South Australia], 2003.
- [12] PPP Models [Electronic resource]. Available at: http://www.kdmconsultancy.com/en/pppModel.php
- [13] Public private partnerships [Electronic resource] / HM Treasury. 2008. Available at: http://www.hm-treasury.gov.uk/documents/public\_private\_ partnerships/ppp\_index.cfm.
- [14] Public-private partnership handbook [Electronic resource]. Philippines: Asian Development Bank, 2008. Available at: http://www.adb.org/documents/public-private-partnership-ppp-handbook.
- [15] Webb R. Public Private Partnership: An Introduction [Electronic resource] / R. Webb,
   B. Paul. Canberra: Parliament of Australia, 2002. Available at: http://www.aph.gov.au/binaries/library/pubs/rp/2002-03/03rp01.pdf.

# 4.2 State support of economic cooperation of China and Ukraine enterprises

Chinese economy is the first economy in the world by the produced added value. China concentrates significant investment, innovation, scientific and technical potential. At the same time, China is interested in developing cooperation with Ukrainian partners, despite the considerable potential in many areas of the national economy. Despite the fact that Ukraine and China established strategic partnership in 2011, the amount of attracted Chinese investments in Ukraine decreased and promising innovative projects were "frozen". Thus, there is a need to develop scientifically based recommendations for the introduction of new mechanisms to enhance investment and innovation cooperation between Ukraine and China.

The topical issues of Ukrainian-Chinese cooperation in trade-economic, investment and innovation are studied by domestic scientists R. Moldavchuk, I. Odotiuk, A. Goncharuk, S. Koshovyy, Y. Yaroshenko, and foreign scientists M. Kaszmarski, L. Zuokui, etc. However, the problems of intensifying investment and innovation cooperation between Ukraine and China should be conceptualized with the latest position, given the current challenges of global development and the difficult political and economic situation in Ukraine.

The creation of favorable development conditions for the business climate in Ukraine remains one of the most urgent tasks. The amount of foreign direct investment (equity) in the economy of Ukraine on 1<sup>st</sup> of July 2015 totaled USD 42851.3 million and 1000,5 USD per capita (excluding the temporarily occupied territory of the Autonomous Republic of Crimea, Sevastopol and the part of the zone of counter-terrorist operations).

From January to June 2015 the foreign investors invested USD 1042.4 million in Ukraine, and took out 351.3 million USD of direct investments (share capital). Reduction of the share capital cost due to reassessment, losses and requalification amounted in 3604 million USD, including USD 3539.3 million lost due to exchange rate difference.

In the year 2015 the investments floated from 133 countries. The EU countries made USD 33154.9 million of the investments (77.4% of total share capital), the other countries of the world scored USD 9696.4 million (22.6%). More than 83% of direct investments accrue to ten major countries-investors: Cyprus – 12274.1 million USD, Germany – 5489 million USD, the Netherlands – 5108 million USD, Russia – 2685.6 million USD, Austria – 2354.3 million USD, UK – 1953.9 million USD, the British Virgin Islands – 1872.6 million USD, France – 1539.2 million USD, Switzerland – 1371.2 million USD and Italy – 966.6 million USD.

At the same time the amount of Ukrainian direct investments (share capital) to the foreign countries economies on the 1 of July 2015 totaled 6254.4 million USD, including the EU countries- 6015.4 million USD (96.2%), and other countries of the world - 239,0 million USD (3.8%). Direct investments from Ukraine were injected to 46 countries around the world, mostly to Cyprus (93.0%).

The requirements of the Ukrainian direct investors for the debt instruments to the enterprises of direct investment abroad made up 218 million USD on 1 July 2015. The amount of direct investments (capital share and debt instruments) in the economy of the countries of the world totaled 6472.4 million USD.

Ukraine and China (PRC) declared strategic partnerships. China has recognized Ukraine as a sovereign state December 27, 1991, and a week later, January 4, 1992, two countries established diplomatic relations. China consistently supports the sovereignty and territorial integrity of Ukraine. Ukraine steadily remains committed to the policy of "one China" (Moldavchuk R., 2016).

According to the Ministry of Foreign Affairs of Ukraine, the legal base of bilateral relations consists of 295 documents: 177 documents in the main list (agreements and contracts) and 118 documents in additional list (protocols of intergovernmental committees, subcommittees, contracts for military training, etc.). Countries support active inter-parliamentary relations.

Trade and economic cooperation between Ukraine and China is regulated by the Agreement between the Government of Ukraine and the Government of China on Trade and Economic Cooperation (1992), according to which the MFN status is established to levy customs duties on exports and imports of the both countries, taxes and other internal meeting.

Foreign trade cooperation between Ukraine and China is governed by the Trade and Economic Cooperation Agreement between Government of Ukraine and Government of the People's Republic of China (1992) that states the setting of most favorable regime regarding the duties levy for exported and imported goods of both countries as well as taxes and other domestic dues.

2014 showed the goods turnover between Ukraine and China (data of the State statistics Service of Ukraine) 8.1 bln USD. The exported goods amount from Ukraine was 2.7 bln. USD showing decline of 0.6%, imported goods amount was 5.4 bln. USD and declined 27.4%. Bilateral foreign trade balance in favor of China made 2.7 bln USD.

The leading positions of Chinese imports in 2014 were as follows: mechanical equipment, machines, installations and mechanisms (30.8%), textile and textile items (15.3%), nonprecious metals and produced items (10.2%), polymer materials, plastics and rubbers (8.6%), various goods and items, mostly furniture, lightings, toys etc. (6,5%), shoes, hats, umbrellas (6,5%), chemicals (5.7%).

The leading positions of Ukrainian exports for 2014 continued the traditional trend and were as follows: minerals - mostly iron ores, slags and ashes, energetic materials etc. (65.9%), animal or vegetable fats and oils (12.9%), phytogenous products, mostly grains (8.7%), timber and produced items (7.0%), mechanical equipment, machines, installations and mechanisms (2.0%), nonprecious metals and produced items (1.1%). The other goods positions of Ukrainian exports to China did not exceed 1% of the total export structure.

Six month of 2015 showed the trade turnover between Ukraine and China on the level of 2.67 bln USD. Goods exports amount from Ukraine made 1.14 bln USD (-12.8%), imports amounted to 1.53 bln USD and declined 28.4%. Bilateral foreign trade balance in favor of Ukraine made 390.44 mln USD.

The growth of Ukrainian goods export to China was at the account of export supplies increase of phytogenous products, mostly grains, by almost 8 times (727%), mechanical equipment, machines, installations and mechanisms by 23% and animal or vegetable fats and oils by 14%. As per 01.01.2015 the amount of Chinese FDI in economy of Ukraine made US 24 million (above amount shrank by US 1.6 million since the beginning of year). The greatest share of investments was allocated to the industrial enterprises – 30.5%, including wood processing industry (20%), agriculture (20%), transport (15%), wholesale and retail trade (14%).

The dynamics of foreign trade in goods and services between Ukraine and China is described by the data in Table. 4.2.

Table 4.2

	2012	2013	2014	2015	Relative change,% (2015/14)	First quarter 2015	First quarter 2016	Relative change,%
Export	1.858	2.760	2.719	2.439	-10.3	.698	.593	-15.0
Import	7.924	7.533	5.456	3.898	-28.6	1,100	1,076	-2.1
Commodity circulation	9.782	10.294	8.176	6.339	-22.5	1.798	1.670	-7.1
Balance	-6.067	-4.773	-2.737	-1.459	-	-0.402	0.483	-

### Dynamics of foreign trade in goods and services between Ukraine and China, billion USD

Based on the data from the Ministry of Economic Development and Trade of Ukraine, Calculations author (Ministry of Economic Development and Trade of Ukraine, 2016)

As it is seen from the data presented in Table 4.2, the dynamics of foreign trade in goods and services between Ukraine and China during 2014-2015 tends

to decrease. In 2015, the volume of total turnover compared to the previous year decreased by 22.5%, including exports decrease by 10.3% and imports – by 28.6%. The balance between exports and imports is negative for the national economy of Ukraine (Ministry of Economic Development and Trade of Ukraine, 2016).

In 2014-2015, the main part of Chinese imports was mechanical equipment, machines, equipment and mechanisms (30.8%), textiles and textile products (15.3%), non-precious metals and its goods (10.2%), polymeric materials, plastics and rubber (8.6%), footwear, headgear, umbrellas (6.0%), chemical products (5.7%) (State Statistical Service of Ukraine, 2016).

The main item of Ukrainian exports to China in 2014 -2015 remain mineral products (mainly iron ores, slag and ash, energy materials, etc.), which share was 65.9% of total exports to China; fats and oils of animal or vegetable origin (12.9%), vegetable products, mainly cereals (8.7%), wood and wood products (7.0%), mechanical equipment, machines, equipment and mechanisms (2.0%), non-precious metals and its goods (1.1%) (State Statistical Service of Ukraine, 2016).

The promising strategic area of economic cooperation with China is the direct involvement of Ukraine to the initiative of the Chairman of China to develop the Silk Road economic belt.

Analyze the state of investment cooperation between Chinese and Ukrainian entities. Dynamics of Chinese investment in Ukrainian economy is described by the data in Table 4.3.

As it is seen from the data presented in Table 2, the growth of Chinese investments in Ukraine's economy in 2014-2015 is negative, which means that investors from China withdraw their investments (and downsized the economic activity). The maximum positive index of attracted Chinese investments was recorded in 2013, but this amount - only 6.9 million USD - is extremely scarce comparing the opportunities of Chinese investors and Ukrainian economic potential. Cooperation between the entities in the investment field is limited by

high risk of economic operations in the national economy of Ukraine (The State Statistical Service of Ukraine, 2016).

Table 4.3

	2010	2011	2012	2013	2014	2015
The increase during the year	0.9	2.2	3.3	6.9	-1.6	-3.7
Accumulated amount	13.1	15.3	18.6	25.5	23.9	20.2

Dynamics of Chinese investment in Ukraine (end of year), million USD

Based on the data from the Ministry of Economic Development and Trade of Ukraine and The State Statistical Service of Ukraine Calculations author (Ministry of Economic Development and Trade of Ukraine, 2016, The State Statistical Service of Ukraine, 2016)

Data on the structure of Chinese investments into the Ukrainian economy is presented in Table 4.4.

Table 4.4

	20	015	2016		
	million USD	% of total	million USD	% of total	
Total	21.014	100.0	20.152	100.0	
Agriculture	4.808	22.9	6.130	30.4	
Transport, mail	3.630	17.3	3.936	19.5	
Industry	4.531	21.6	3.261	16.2	
Trade	3.271	15.6	3,085	15.3	
Construction	1,234	5.9	1.152	5.7	
Tourism, travel	0.205	1.0	0.194	1.0	
Real estate	0.160	0.8	0,142	0.7	

### Structure of Chinese investments in the Ukrainian economy (at the

£ 41.

Based on the data from The State Statistical Service of Ukraine. Calculations author (The State Statistical Service of Ukraine, 2016)

The data in Table 4.4 shows that Chinese investors actively invest in the most attractive branches of Ukrainian economy - agriculture, transport and mail, industry and trade. At the same time, the attracted Chinese investment in some economic activities in 2015 (manufacturing, trade, construction, tourism and travel, real estate) decreased over the previous year, which lead to decreasing for the index of investments borrowed from China for the whole economy (The State Statistical Service of Ukraine, 2016).

Chinese telecom equipment manufacturers Huawei, ZTE, Xinwei opened their offices in Ukraine. The offices of Ukrainian companies - GC "Ukrspetsexport", JSC "Motor Sich", JSC "FED", "Creative Group", "Korum Group" are opened in China (Ministry of Economic Development and Trade of Ukraine, 2016).

The following promising infrastructure projects, can be implemented by Chinese investment and (or) by export credits from China, can be selected (A.Goncharuk, 2016; V.Povoroznik, 2015; Kaszmarski M., 2015; Zuokui L., 2014):

- implementation of the contract for the the national project "Air Express organization of railway passenger traffic Kyiv the international airport "Boryspil" and construction of other infrastructure of the Kiev region" (project cost 372 million USD),
- implementation of joint projects within the framework of the Memorandum of Understanding between the Ministry of Agrarian Policy and Food of Ukraine and the Export-Import Bank of China on cooperation in agriculture amounting 3 billion USD,
- implementation of joint projects in the energy sector under the Loan Agreement between NJSC "Naftogaz of Ukraine" and the Bank of China in the amount of 3.6 billion USD (including construction of coal gasification at the Odessa port plant, modernization for a number of Ukrainian CHP, construction of a gas interconnector between Poland and

Ukraine, modernization Shebelynka GPP of JSC "Ukrgazvydobuvannya"),

- implementation of pilot social on housing with mortgage lending in Kiev amounting 1 billion USD under the Memorandum of Understanding on cooperation in the construction of affordable housing in Ukraine between the Ministry of Regional Development, Construction and Housing and Chinese state company CITIC Construction Co., Ltd.

The Parties shall maintain and develop cooperation in the innovation, science and technology. Within the framework of Intergovernmental Cooperation, Subcommittee on Scientific and Technical Cooperation, Subcommittee on Cooperation in Space Industry and Subcommittee on Cooperation in the Field of Education. The following areas of cooperation in the field of innovation, scientific and technical activity are identified as the priorities: energy, aviation, shipbuilding, environmental management, development of aerospace, information and communication technologies, as well as the preparation and training of graduate students and young scientists.

The implementation of the third five-year program of cooperation in the space sector (2011-2015) is continued. The fourth program (2016-2020) is being developed.

The analysis of economic exhibitions, fairs and publications testifies that Chinese partners are interested in implementing a series of economic initiatives in investment and innovation (A.Goncharuk, 2016; V.Povoroznik, 2015; E.Yaroshenko, 2015):

- to develop the "road map" for the implementation of Chinese initiative to create "Silk road economic belt",
- to increase in purchases of high-tech products and high technologies.
- to involve Chinese partners in joint projects in the development and implementation of nanotechnology,
- o accelerate the implementation of DC "Ukrspekeksport" high-tech contract concluded in 2008.

At the same time, Ukrainian side also has a number of interests, including:

- large-scale involvement of direct Chinese investment for investment and innovation projects in Ukraine,
- creation of joint ventures and production clusters for the production of high-tech products in the field of aerospace, power engineering, automotive; further implementation of projects in the space sector,
- creation of Ukrainian-Chinese innovation center or industrial park in China,
- organizing presentations of economic, investment and innovation potential for the regions of Ukraine in China,
- receipt of grant aid from the Government of China for the implementation of social projects through procurement and delivery to Ukraine of innovative medical and rescue equipment.

Cooperation between Ukraine and China in the fields of sciences and technology, space and education is in the priorities of our bilateral relations.

The Sides are completing the third Programme on Space Cooperation (for 2011-2015) and are working on the new fourth document.

In 2012 a renewed Agreement on cooperation in education field was signed between the Ministries of education of Ukraine and China, according to which the state students exchange quota was increased to 100 scholarships.

There are already 5 Confucius institutes in different universities (Kyiv, Luhansk, Kharkiv and Odessa) and the sides planning to open new ones.

Several Ukrainian centers are functioning in China. Recently were established the following centers:

- Ukraine-China Centre on transfer of shipbuilding technology was created by Science and Technology University of Jiangsu province and Ukrainian National Shipbuilding University of Mykolaiv in 2012 in Zhejiang Province,
- Shevchenko Centre on Ukraine-China cultural relations was opened in
   2014 in Tianjin and the Center of Ukrainian studies named after Taras

Shevchenko was established in the University of Foreign Studies and in Dalian University of Foreign Languages (Liaoning Province).

During 2014-2015 the Ukrainian government implemented a set of measures to create a whole new level of business environment, which is to provide economy revival and steady development in Ukraine.

Owing to this fact, In the World Bank rating Doing Business 2015» according to the indicator of the easiness of doing business, Ukraine occupies 96 position among 189 countries of the world (112-in 2014).

Legal framevork for investment and development of private-state partnership is set up in Ukraine. The legislation of Uktaine determines the guarantees for investors' activity, economic and organizational foundation for the realisation of private-state partnership.

National regulations of investment activity are implied on foreign investors on the territory of Ukraine, equal bussiness conditions with local investors are granted. Foreign investments are not subjected to nationalization.

In case of shut down of investment activity foreign investor is guaranteed return on investment in its genuine form or in the currency of investment, tax free as well as revenues from the investment in monetary or commodity form. The state also guarantees unhampered and immediate abroad transfer of revenues and other funds in foreign currency legally obtained due to foreign investmens.

To enhance the protection of foreign investments the Washington Convention of 1965 on the Settlement of Investment Disputes between States and Nationals of Other States was ratified by the Law of Ukraine No. 1547 addopted on 16 of March 2000.

The Commissions for the assistance on the pre-trial settlement of disputes with investors that might be created by the executive authorities and local authorities as temporary advisory consultative bodies to facilitate pre-trial settlement of disputes between an investor and executive authority (local government) are aimed at solving the disputable issues.

The intergovernmental agreements on promotion and mutual protection of investments are signed and ratified by the Verkhovna Rada of Ukraine with more than 70 countries of the world.

For the purpose of proper implementation of national foreign policy and foreign economic priorities, promoting Ukrainian exporters on foreign markets, protection of their economic and trade interests abroad as well as attraction of foreign direct investment in the economy of Ukraine the Council of exporters and investors has been operating at the Ministry for Foreign Affairs of Ukraine since April 2013.

For the aim of activation and realization of the investment potential of Ukraine, increasing foreign investments amounts, priority investment projects support, investment environment improvement, guarantee of the protection of investors' rights, assessment in effective cooperation of investors with state authorities, in December 2014,by the decree of the president of Ukraine the National Investment Council was formed.

Aiming at the search of viable mechanisms of foreign investments involvement to Ukraine the government regularly holds business forums with foreign investors' participation. Indicated measures are to contribute to improve the investment image of Ukraine and to provide growth of foreign investment amounts and capital investments in the economy of the state.

The intensification and diversification of investment and innovation cooperation between Ukraine and China is promising. Ukraine and China have great potential for further expansion of investment and innovation cooperation, since they have mutual interests in this area.

It is necessary to intensify the work of the Commission for Cooperation between the Government of Ukraine and the Government of China, including the Subcommittee on Trade and Economic Cooperation, Subcommittee on Scientific and Technical Cooperation and the Subcommittee on Cooperation in Space Industry. It is supposed to create a monitoring mechanism for the investment and innovation cooperation between Ukraine and China, including the ability to resolve the problems of Chinese investors in Ukraine. Such a mechanism should be created in a short time at the level of experts within the framework of the Subcommittee on Trade and Economic Cooperation.

It is required to adopt a management decision on the opening Ukrainian trade and economic missions in China, which should inform potential Chinese investors about the opportunities of economic and investment cooperation with Ukrainian partners and provide information, advice and legal assistance to Ukrainian business structures conducting business in China.

The authorities of Ukraine (especially the Foreign Ministry and Ministry of Economic Development) have to study and propose concrete pragmatic solutions for joining Ukrainian side to the China initiated project "One zone. One way" that will expand the traditional scope of cooperation, ensure greater mutual openness of markets for goods, services and technologies.

Chinese investors, what is not surprising, are actively investing in highly profitable industries. And the interest in cooperation manifests itself even in times of high risk. Thus, Summit (Conference) on investment and innovation cooperation between Ukraine and China, including the exhibition of promising investment and innovation projects would be helpful. This event is advisable to conduct in two rounds (one round in each of the countries). If successful, the said Summit should be conducted annually.

The further increase of cooperation in scientific and educational fields, including academic exchange programs will be useful. The funding for the implementation of the above initiatives should be envisaged in the budget of Ukraine.

### References

- [1] Гончарук А. Шовковий шлях: від концепції до практичних кроків (формат взаємодії 16+1) / А.Гончарук, С.Кошовий // Стратегічна панорама. 2016. № 1. С.26-35.
- [2] Зовнішньоекономічна діяльність [статистичне видання] / Держстат України, 2016. http://www.ukrstat.gov.ua.
- [3] Інвестиції зовнішньоекономічної діяльності [статистичне видання] / Держстат України, 2016. http://www.ukrstat.gov.ua.
- [4] Проект «Один пояс один шлях»: можливості для України / В.Поворозник, В.Перебийніс. К.: МЦПД, 2015. 31 с.
- [5] Статистичний щорічник України за 2014 р. / за ред. І.М.Жук. К.: Держстат України. К., 2015. 585 с.
- [6] Щодо співробітництва України з Китаєм / Міністерство економічного розвитку і торгівлі України, 2016. Електронний ресурс. Доступний з: <u>www.me.gov.ua</u>
- [7] Ярошенко Є. Місце України в глобальних стратегіях Китаю / Є.Ярошенко. К.: МЦПД, 2015. 44 с.
- [8] Kaszmarski M. The New Silk Road: a versatile instrument in China's policy / M. Kaszmarski. OSW Centre for Eastern Studies, 2015. Number 161. 89 p.
- [9] Moldavchuk R. The strategic partnership of China and Ukraine / R.Moldavchuk, I.Odotiuk // Modern science. 2016. № 2. C.77-82.
- [10] Zuokui L. Central and Eastern Europe in Building the Silk Road Economic Belt / L.Zuokui. – Working Paper Series on European Studies Institute of European Studies Chinese Academy of Social Sciences. – 2014. – Vol. 8. – No. 3. – 130 p.

### 4.3 Security control features of the insurance market of the European Union countries

Integration into the single European insurance market suggests a wide use adopted in the international practice of accounting standards, information transparency, solvency assessment and capital adequacy. The openness of insurance markets determines the development of cooperation and communication between insurance regulators to ensure protection of the interests of policyholders and the stability of the socio-economic development of the country.

Review of foreign scientific literature and legislative documents suggests that the system of insurance regulation of the European Union allocates a certain set of activities that are aimed at ensuring the security of the insurance market, since it is generally aimed at creating conditions for its safe operation and the prevention of the negative impact of threats. The system of insurance regulation of the European Union can be considered exemplary from the point of view of security, which is based on the principles of stability of legislation, ensuring effective interaction between the Executive and the legislature, the inevitability and compulsory application of sanctions in case of violation of laws.

On 25 March 1957 an agreement to create a common market in several countries of western union was signed in Rome, which later was turned into the European Union. Under the agreement, over the next twelve years it was necessary to develop and adopt a single legislative regulation of economic relations in the participating countries, the directives in various sectors of the economy, aimed at defining a single, among which there was a dedicated Directive for the regulation of the insurance market. Deepening the integration movement of the European countries necessitated the establishment of a General legal framework for the functioning of the insurance market. Among the existing approaches the model has been chosen, which created a single insurance market with the retention of features of national legislation, including tax policy and the state supervision of insurance activity.

The basic steps of creating a single European insurance market can be identified, respectively, before the adoption of the directives on insurance, implementing "freedoms", adopted by the Treaty of Rome. These directives have gradually liberalized the activities of the insurers of the countries–participants of EU, and also provided the freedom of choice of policyholders of insurance companies, no matter in what state it is in. To study the process of developing a unified legislative platform for the insurance community in the European Union we have grouped in Fig. 4.2 the basic EU directives for the regulation of the General insurance market.

The harmonization and unification of the insurance legislative framework of member countries of the European Union has become a key prerequisite for creating a single insurance market, which provides General guidance for conducting insurance business in a competitive environment, the safety regulation of the insurance market and protection of the interests of policyholders.

European insurance legislation is based on EU Directives to regulate insurance activities in the following areas [9]: Non-Life (General, or "term life" insurance); Life (life Insurance); Accounting (Bookkeeping and financial reporting); e-Commerce (E-business); Insurance groups (Insurance groups); Financial conglomerates (Financial conglomerates); Insurance mediation (Insurance mediation); Motor insurance (vehicle Insurance); Reinsurance (Reinsurance); Solvency (Solvency); Winding-up Liquidation and reorganization of insurers); European Insurance and Occupational Pensions Committee (European Committee for supervision of insurance markets and pension schemes); International agreement (treaties).

180

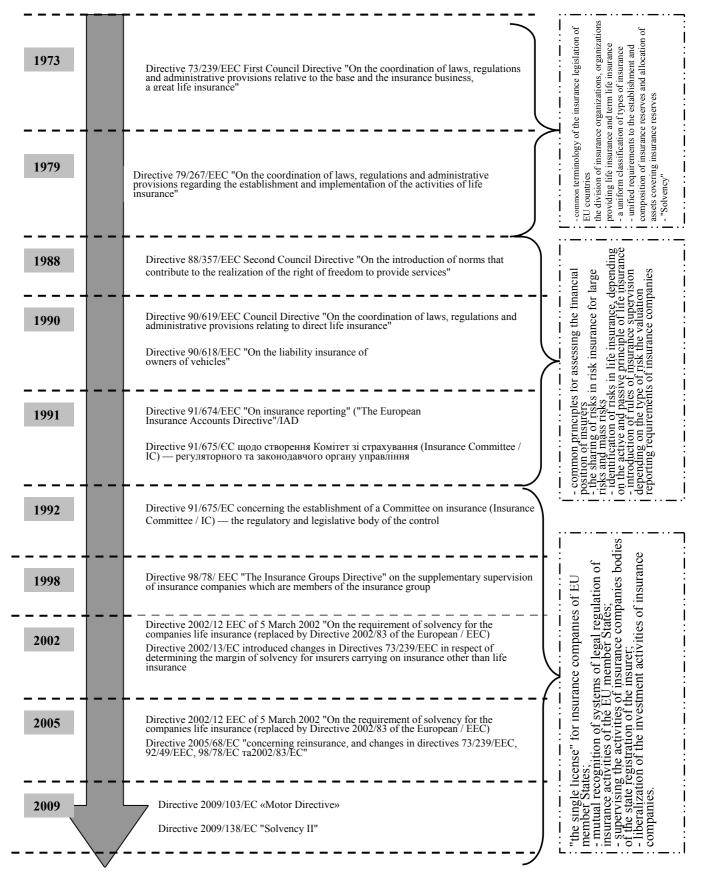


Fig. 4.2 Basic EU directives for the regulation of the General insurance market\* \*Source: compiled and supplemented by the author on the basis [4], [7], [8]

In a unified legal framework there has been established the strategic foundations of the security of the European single market. The key task and direction of the regulatory influence of European legislation is to protect the interests of insurance consumers and provide protection against fraud. This is considered as the basis for a safe development of the European single market. As shown in Fig. 1 three generations of directives are aimed at monitoring the solvency of insurance companies ("solvency"), protection of the rights of consumers of insurance services regulation of insurance intermediaries, etc.

"Solvency" is a fundamental and all-encompassing revision of the existing Directives in the field of insurance. The main goal of this project is to enhance the protection of policyholders in the EU. The project takes into account current developments in insurance, risk management, financial management, international financial reporting etc. [1, p. 189].

One of the main goals of the project is to design and implement based on the assessment of investment risk system of requirements to own funds of proper entities of the insurance market. Risk assessments will be the basis of requirements to amount of capital. Another important point is the improvement of the supervision of insurance companies by means of harmonizing the methods and instruments of control.

Purposes of "Solvency I" was a revision and updating requirements, standards of solvency of insurance companies. Today, the EU has been gradually developing and implementing the project "Solvency II", which is designed to solve a wider range of problems.

According to "Solvency II" requirements to the norm of solvency for European insurance companies have been updated and improved as a result of the implementation of the project "Solvency I Directive" (Directive 2002/13/EC of the European Parliament and of the Council of 5 March 2002 amending Council Directive 73/239/EEC on the requirements to the solvency margin for insurance, except life insurance; Directive 2002/83/EC of the European Parliament and of the Council of 5 November 2002 on life insurance) in 2002. "Solvency II" covers all insurance and reinsurance companies in the case that [12]:

- profit from the annual total volume of written premiums of the company exceeds 5 million €,
- the total amount of technical reserves, including gross income from return of amounts that are reimbursable, in accordance with the reinsurance treaties and the special obligations of legal entities if exceeds 25 million €,
- the total volume of technical fund of the insurance company, a member of the group if exceeds 25 million €,
- the activities of insurance companies for insurance or reinsurance. Which
  include insurance of risks of responsibility, akrediteerimine and financial
  losses, except when the latter are additional risks of another class;
- the activities of insurance companies for reinsurance services. The financial value of which exceeds 0.5 million € of total written premiums or 2.5 million € of gross income from the refund of the amount of technical reserves which are recoverable, in accordance with the reinsurance treaties and the special obligations of legal entities, or more than 10% of the total volume of premiums written or over 10% of the gross income from the refund of the amount of technical reserves which are recoverable, in accordance with the reinsurance from the refund of the amount of technical reserves which are recoverable, in accordance with the reinsurance from the refund of the amount of technical reserves which are recoverable, in accordance with the reinsurance treaties and the special obligations of legal entities [12].

If any of these amounts were exceeded within three years, the terms of "Solvency II" are applied starting in the fourth year. It can be argued that the "Solvency II" takes into account the size effect in the activities of insurers or the principle of proportionality of the size and scope of responsibility: small organisations should not have large costs for risk calculation and reporting. The establishment of more stringent requirements for capital adequacy and risk management for major insurers will reduce their risk of insolvency, loss of customers and market disruption.

The structure of the project "Solvency II" was developed by the European Committee of control over insurance markets and pension schemes (CEIOPS – Committee of European Insurance and Occupational Pensions Supervisors). The structure of the "Solvency II" consists of three components (tab.4.5), covering quantitative and qualitative requirements of solvency and market discipline. Among the quantitative requirements remain essential requirements for the amounts of the MCR and SCR, among quality – the presence of the insurer's own risk assessment and solvency, compliance with market discipline, information disclosure system.

## Table 4.5

Component 1 (quantitative requirements of solvency)	Component 2 (qualitative requirements of solvency)	Component 3 (market discipline)	
The requirement to minimum of required capital (MCR)	Implementation of effective risk management including internal control and internal audit in the company		
The requirements for adequacy calculation of capital required solvency capital (SCR)	Self-assessment of risk and solvency (ORSA)s to determine and measure the risks associated with events in the short and long periods, which may affect the risk management and		
Requirements for reinsurance and other procedures to reduce risks			
Requirements to calculation of own capital		Requirements for public disclosure with the aim of strengthening the discipline	
Rules of calculation of technical reserves	The implementation of the actuarial function regarding the calculation of capital with the aim of management based on risk assessment		
The principle of "reasonable conduct" in the requirements for investments, freedom of investments	Activities of the Supervisory authorities at EU level, transparency, rights and obligations	Providing reporting to supervisory bodies	
	of the regulators		

### 2009/138/EC\*

Structure of the basic requirements of "Solvency II" Directive

\*Source: [11], [12], [13]

Component 1 (quantitative requirements). "Solvency II" establishes two methods for estimating the margin of solvency: the European standard formula and internal model, independently developed by the company and agreed by the regulator of the country.

The requirements for the formation of regulatory capital consist of two levels that is similar to the terms of the "Solvency I":

- minimum capital requirements (Minimum Capital Requirements MCR).
   In case of non-compliance with the insurance supervision body will have the right to revoke the license to conduct insurance activities immediately;
- capital adequacy requirements to ensure the solvency or the so-called required solvency capital (Solvency Capital Requirements – SCR). The availability of the necessary solvency capital is a key requirement of solvency, which is based on risk assessment. In case of non-compliance the insurance Supervisory authority may require the financial recovery plan, to appoint representatives to the governing bodies of the company, to limit the use of assets and to apply other sanctions [12].

The requirement of minimum required capital MCR in the "Solvency II" is similar to the requirements concerning the minimum guarantee Fund MGF in the "Solvency I". However, the amount of MCR in accordance with the "Solvency II" is increased and :

- 2.2 million € for organizations that are engaged in non-life insurance including captive insurance companies, except for covering all or some risks of liability, and surety (when it should be at least 3.2 million euros),
- 3.2 million € to organizations involved in life-insurance including controlled insurance company,
- 3.2 million € for reinsurance companies, except for controlled reinsurance companies, in which the minimum required capital will be not less than 1 million €,

 the sum of the values determined in subparagraphs 1 and 2 for insurance companies in case of the simultaneous holding of life insurance and nonlife insurance [13].

The most difficult is the calculation of the required solvency capital (SCR), which must contain the individual risk elements collected together. Note that the value of the indicator SCR is not constant, but will vary depending on the risks dealt with by insurance company. Thus, the SCR becomes a random variable and can be described using the distribution function that determines the probability of possible values of SCR. Therefore, with the aim of promoting high quality risk management and harmonization of regulatory capital requirements with industry features SCR should be defined as economic capital that has to refrain insurance and reinsurance organizations, with a guarantee that bankruptcy will occur not more often than once in 200 cases, or alternatively that these organizations will have the opportunity with a probability of at least 99,5%, to meet its obligations to policyholders and beneficiaries over the following 12 months.

Component 2 (qualitative requirements) provides for the procedure of inspection control. Supervisory authorities assess not only financial performance, but also strategy, key business processes, risks of the insurer. If the Supervisory authorities will assess the level of capital calculated in accordance with the "Solvency II" as insufficient, they will have the right to demand its increase. At the same time, they have the right to apply sanctions to managers and owners of the company, and to conduct onsite inspections. In addition, each insurer should have its own risk assessment and solvency, which is, on the one hand, a tool for insurance companies, helping them to make the right decisions when performing insurance activities, on the other hand, a tool for Supervisory authorities aimed at identifying the riskiness of the portfolio.

The financial regulation of insurers by the EU authorities deserves special consideration. For this we consider what the capital structure of the insurer and its own funds comprises of. On the one hand, own funds (VC) equal to the

difference between the market value of the assets and the market value of liabilities, on the other – the amount of own funds equal to the amount of regulatory required solvency capital (SCR) and surplus capital (NK). And regulatory required solvency capital (SCR) more than the minimum required capital (MCR). The value of SCR is not included in own funds and is formally calculated value. The condition of solvency is SCR > MCR, VC > SCR.

When using the regulator of the insurance market three-tier assessment can be argued that the insurer receives:

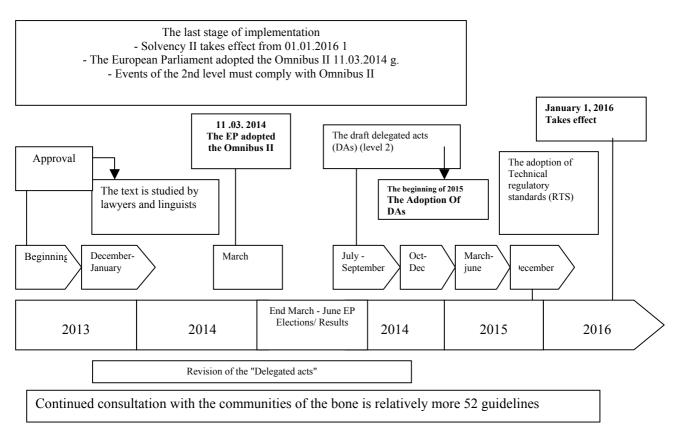
- red card removal from the market, if NK < 0 and SCR < MCR or VC < SCR,</li>
- "yellow card" warning and sanctions, if NK > 0 and SCR = MCR or NK = 0 and SCR > or VC MCR = SCR,
- "green card" is authorization to continue activities if NK > 0 and SCR > or VC MCR > SCR [12; 13].

So speed and light weight method of intervention can be applied on any review date, not only on the results of the annual report. In our opinion, this method is expedient to implement the financial regulation of the insurance market in Ukraine.

Component 3 (market transparency). To ensure that the internal model of the insurer or reinsurer is working correctly, it is necessary to establish a close contact of companies with Supervisory bodies to disclose information. EU insurers are obliged to publish annual reports about their financial condition, including, in particular, description of the business and the corporate governance system and assessing its adequacy, the risk profile of the insurer, risk exposures, valuation methods of assets and liabilities, structure and quality of equity capital, the size of the MCR and SCR, information about any mismatch MCR or SCR during the reporting period. The majority of insurers in the EU publish full financial report for the standard forms on their official websites on the Internet.

So, the given approach to monitoring the solvency of insurance organizations operating on the European single market is in compliance with the capital adequacy. The margin of solvency of an insurance company is determined by mapping its assets existing at a certain time commitments, as well as calculated the amount of free from funds liabilities. In case of insufficient capital the state of an insurance organization from the perspective of solvency is described as critical. In such a situation, public authorities must apply appropriate responses.

Fig. 4.3 shows a diagram of the last stage of introduction of "Solvency II", which demonstrates the evolution of this process. It shows the complexity of the process, and therefore, the mechanical implementation of "Solvency II" in domestic practice is not advisable because it can lead to negative consequences for the insurance market of Ukraine.



## Fig. 4.3 The period of implementation of Europe's Solvency II system (Loyds)\*

T. Govorushko states [3] that the approach to assessing the solvency of insurance companies provided by Directive 2009/138/EC, has significant

differences from the existing requirements in Ukraine. It is necessary to highlight the narrow focus of the latter in the calculation of standards of solvency in connection with the account only the premiums, as the only which reflects the risks of insurance companies. According to N. Pazuria the ineffectiveness of this approach has been proven in practice IIIT European Union, where 85 insurance companies that were under the control of the regulatory authorities due to a mismatch in capital requirements Solvency I 20 went bankrupt [6].

Common practice of introducing a policy on disclosure of information by insurers in Europe is the establishment by regulators of Minimum standards of information disclosure with the mandatory requirements regarding the format, nature, frequency and purpose of disclosure. In this context, special attention deserves the fact that the vast majority of systemic risks for the insurance sector may also be related parties, which the regulator does not have information sufficient to take appropriate action. With this aim it is mandatory to establish the possibility of obtaining relevant information from external experts (auditors and actuaries) [1, p. 195].

The enforcement of insurers Minimum standards of information disclosure is possible only in the case of the establishment of appropriate conditions and at the management level of the financial institution that is responsible for the implementation of appropriate risk models, and at the level of state control of financial institutions (for example, by reducing the rating or setting requirements for capitalisation).

The conditions of information disclosure according to the principles of Solvency II is possible through the modernization of existing technologies or the introduction of more modern IT systems that are better adapted to the new requirements. Today in Europe the process of integration of new information systems for analysis and more effective financial control of insurance companiesi s based on the principles of Solvency II. New IT programs enable insurers to adhere to all aspects of the Directive, while simultaneously improving the strategy and effectiveness of the activities. Risk managers, external regulators and its managers must understand the rules and build a joint strategy to achieve this risk management quickly that would take into account the calculations of required capital, risk management and financial reporting. Modern technologies make it possible to consolidate data, make calculations, predictions in different areas of the organization and to generate reports and external regulator, and management of the company.

In Europe there are many programs offered by insurers to improve management capabilities and increase the automation of business processes through the implementation of EIOPA, the latest set of quantitative reporting templates are Quantitative Reporting Templates (QRTs) and Quantitative Impact Study for Solvency II (QIS 5), which helpsto calculate and represent groups of insurers efficiently, and at the solo entity level solvency capital requirements (SCR) are based on the standard formula.

Regular reporting under Solvency II includes private accounts for managers in the form of regular Supervisory report (RSR Regular Supervisory Report) and public disclosure to all interested parties in the form of a report solvency and financial condition (Solvency and Financial Condition Report, SFCR).

In general, the report SFCR and RSR combine qualitative information on the status of risks and associated capital adequacy of the insurer and description of risk management processes.

Quantitative reporting takes the form of quantitative reporting templates (QRTs). QRTs collects information on the balance sheet assets, the requirements for solvency capital (SCR) is minimum capital requirements (MCR), technical provisions, information regarding the change analysis and reinsurance. Each form must be filled in the manner prescribed by EIOPA. To this end each of the statements attaches special files with explanations. For large insurers, there is some additional information required for the purposes of financial stability, reported in the QRTs. A list of the main analytical tables of Quantitative

Reporting Templates (QRT) is given in Appendix C. A full set of QRTs should be provided to managers quarterly and annually.

The European Union	Ukraine	
<ul> <li>- <u>Calculated:</u></li> <li>- <u>-</u>mathematical reserves</li> <li>- technical reserves</li> </ul>	Calculated: - mathematical reserves - technical reserves	Reserves
<ul> <li><u>Calculated</u></li> <li><u>-</u>required solvency capital in accordance with Solvency II</li> <li>- available solvency margin</li> </ul>	<u>Calculated</u> regulatory solvency margin	Solvency
<u>Calculated</u> guarantee Fund (free from the obligation of means) the minimum required capital according to Solvency II (regulatory defined)	<u>Calculated</u> guarantee Fund (additional paid- in capital + capital reserve + retained earnings)	Guarantee capital
<ul> <li><u>Calculated</u></li> <li>-</li> <li>- capital subscriptions (not smaller than the minimum required capital)</li> <li>- paid-up share capital(statutory defined)</li> </ul>	<ul> <li>Calculated</li> <li>- the authorized capital (statutory defined minimum size)</li> <li>- paid-up capital (at least 50% at the time of registration of the shares)</li> <li>- minimum authorized capital (regulatory defined)</li> </ul>	The authorized capital

# Fig. 4.4 Comparative characteristics of the tools of providing security of the insurance market

On an annual basis certain QRTs must be publicly disclosed within the SFCR (Solvency and Financial Condition Report). They provide information about the Solvency II balance sheet; of the premium received, claims and expenses; own funds; SCR (Solvency capital requirements), and for small

insurers, the MCR (Minimum capital requirements) and information regarding the technical reserves. Reports on a quarterly basis do not require public disclosure.

In this study it is necessary to explain the requirements of national legislation to the solvency of insurance companies and capital adequacy. To ensure the solvency the Legislation of Ukraine also provides for the calculation and comparison of the "actual margin (margin) solvency" (POF or FMP) and "regulatory reserve (margin) solvency" (WIP or NMP) of the insurer, under FMP > NMP codition. To achieve the maximum solvency level tendency to increase the magnitude of the assets should be maintained and decrease of intangible assets and liabilities [4]. According to the Law of Ukraine "On insurance" from 07.03.1996 N $\ge$ 85/96-BP's own funds must make up the difference of the market of assets and liabilities, the magnitude of the NMP is not part of its own funds and is a calculated value. [4]

Therefore, in the author's opinion, the current method of determining the solvency of the insurance company only reflects the amount of equity on a specific date of calculation, and therefore requires substantial improvements taking into account leading practices of EU.

Also, according to the Law of Ukraine "On insurance", the domestic insurers must have not a minimum guarantee Fund ("Solvency I") or the minimum required capital ("Solvency II") but the so-called minimum capital (MSK). MSK for life companies should reach 1.5 million euros for non-life companies up to EUR 1 million. In the domestic legislation there are no criteria for the minimum required capital but there is for specified minimum share capital. After Ukraine's accession to the WTO the requirements for the authorized capital became more severe for life companies (increase to 10 million euros) and exist without significant changes for non-life-insurers [4].

Comparative characteristics of the construction of safety management system of the insurance market in Ukraine and the European Union from a position of financial regulation are shown in Fig. 4.4. So, the domestic legislation in regulating the safe development of the insurance market is based on the European model of "Solvency I" and does not meet modern requirements of the European Union, which complicates the process of integration into the European single insurance market. To speed up the declared policy of accession to the European community it is necessary to harmonize domestic financial regulations of the insurance market with the relevant EU directives.

### References

- [1] Bazylevytch V. (1997) Strakhovyi rynok Ukrainy [The insurance market of Ukraine]. Znannia, 216
- [2] Hamankova O., Khlivnyi V. (2012) Strakhovyi rynok Ukrainy v hlobalnomu strakhovomy prostori [The insurance market of Ukraine in the global insurance space]. Finansy Ukrainy, 5, 58-67.
- [3] Hovorushko T., Stetsiuk V., Yatsenko I. (2014) Problemni pytannia realizatsiiv Ukraini dyrektyvy CCSolvency II [Problematic issues of implementation of the Directive CCSolvency II in Ukraine]. Journal Ahrosvit, 2, 20-24.
- [4] Londar S., Shirinian L.V. (2011) Yevropeiskyi dosvid finansovoho rehuliuvannia rynku [European experience of financial regulation of the insurance market]. Naukovi pratsi NDFI, 1(54), 99.
- [5] Osadets S. (1996) Problemy vprovadzhennia v Ukraini yevropeiskykh standartiv strakhovoi diyalnosti [Problems of implementation in Ukraine of European standards of insurance activity]. Lviv: Dilo, 188-190.
- [6] Patsuriia N. (2007) Pravove rehuliuvania strakhuvania ta rozdribnykh finansovykh posluh v Yevropeiskomu Soiuzi ta v Ukraini: porivnialno-pravovyi analiz [Legal regulation of insurance and retail financial services in the European Union and Ukraine: comparative legal analysis]. Kyiv: Tsentr utchbovoi literatury, 196.
- [7] Potapova N. (n.d.) Synerhetychnyi rozvytok skladnykh ekonomichnykh system [Synergetic development of complex economic system].Retrieved from http://archive.nbuv.gov.ua/ portal/natural/Vnulp/Ekonomika/2012\_725/26.pdf
- [8] Director Briefings 1-2 April 2014 [Electronic resource] / Lloyd's Mode of access: http://www.lloyds.com/~/media/files/the%20market/operating%20at%20lloyds/solvenc y%20ii/april\_2014\_director\_briefings.pdf – Title from the screen..
- [9] European insurance legislation [Electronic resource] / official site European commission/ Mode of access: http://ec.europa.eu/finance/insurance/legislation/index en.htm Title from the screen.
- [10] Hot Topic. Getting ready for Solvency II reporting. FS Regulatory [Electronic resource] / Centre of Excellence 16 July 2012 PricewaterhouseCoopers LLP. - Mode of access: http://www.pwc.gi/publications/assets/solvency\_ii.pdf – Title from the screen.
- [11] Solvency II PwC [Electronic resource] / Official site PwC. Mode of access: http://www.pwc.com/gx/en/insurance/pdf/Solvency\_finalproof4.pdf – Title from the screen.
- [12] Solvency II Glossary [Electronic resource] / CEA Groupe Consultatif. March 2007.
   68 p. Mode of access: http://www.gcactuaries.org/documents/sol2\_glossary\_final\_160307.pdf Title from the screen.

[13] Solvency II. A closer look at the evolving process transforming the global insurance industry [Electronic resource] // KPMG, 2011. – Mode of access: ttp://www.kpmg.com/us/en/issuesandinsights/articlespublications/pages /solvency-iicloser-look.aspx – Title from the screen.