

ENTERPRISE RESTRUCTURING: PRINCIPLES OF PLANNING (METHODOLOGICAL ASPECTS)

Abstract – A complex of methodological principles for development of the systems of multi-level hierarchical continued planning of restructuring of the industrial enterprises is substantiated.

The current planning principles, their interrelations are analyzed and a system of primary planning principles servicing the methodological aspects for implementation of the concept of the multi-level hierarchical continued planning of restructuring of the industrial enterprises, complying with the present business environment of the enterprises, allowing them to adapt for permanent changes of external economic environment is substantiated.

Key words: industrial enterprise, planning systems, methodological principles.

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РЕСТРУКТУРИЗАЦІЯ ПІДПРИЄМСТВ: ПРИНЦИПИ ПЛАНУВАННЯ (МЕТОДОЛОГІЧНІ АСПЕКТИ)

Обґрунтовано комплекс принципів розробки систем багаторівневого ієрархічного безперервного планування реструктуризації промислових підприємств. Проаналізовано існуючі принципи планування, взаємозв'язки між ними та обґрунтовано систему базових принципів планування, яка забезпечує методологічні засади реалізації концепції багаторівневого ієрархічного безперервного планування реструктуризації промислових підприємств, що відповідає сучасним умовам функціонування підприємств і дозволяє адаптуватись останнім до постійних змін зовнішнього економічного середовища.

Ключові слова: промислове підприємство, системи планування, методологічні принципи.

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РЕСТРУКТУРИЗАЦИЯ ПРЕДПРИЯТИЙ: ПРИНЦИПЫ ПЛАНИРОВАНИЯ (МЕТОДОЛОГИЧЕСКИЕ АСПЕКТЫ)

Обоснован комплекс принципов разработки систем многоуровневого иерархического непрерывного планирования реструктуризации промышленных предприятий. Проанализированы существующие принципы планирования, взаимосвязи между ними и обоснована система базовых принципов планирования, которая обеспечивает методологические основы реализации концепции многоуровневого иерархического непрерывного планирования реструктуризации промышленных предприятий, соответствующая современным условиям функционирования предприятий и позволяет адаптироваться последним к постоянным изменениям внешней экономической среды. Комплекс методологических принципов разработки систем многоуровневого иерархического непрерывного скользящего планирования.

Ключевые слова: промышленное предприятие, системы планирования, методологические принципы.

Problem statement. Increased degree of variability in the external economic environment of the domestic industrial enterprises under conditions of open economy and macroeconomic instability add significance to planning of enterprise restructuring and enterprise development in general, to improvement of the methodology and methodological tools for development of the systems of planning and plans.

The methodological principles of planning shall combine up-to-date and most common scientific beliefs about the structure of plans and planning systems, fundamental requirements to such systems and products of their functioning i.e. plans, following which will make possible all required pre-conditions for effective implementation of the planned function of management at the enterprises and finally their effective operation both while designing the planning systems for development of the enterprises and while developing the plans. The main function of the planning principles is likely to be fulfilled only if there is an internally consistent integral and complete system of such principles, the definition and content of which is scientifically substantiated, rigorous, unambiguous and constructive, where appropriation of every principle and mechanisms ensuring its practical realization are defined.

Relevance of implementation of effective planning systems in operation of the present-day domestic industrial enterprises, significance and role of the main planning principles in the process of their development provides thematic justification of studies aimed at clarification of economic content of the planning principles well-known in the economic science, analysis of correctness and detailing, as appropriate, the definitions of the said principles, establishing their interrelations and building the internally regulated system of the primary planning principles excluding the redundant, auxiliary, light, just trivial and obvious principles.

Analysis of the latest studies and publications. The methodological issues, in particular the principles of planning at the enterprises, are addressed almost in every comprehensive scientific work and educational guide related to planning. A book by Henri Fayol published back in 1916 and translated into Russian in 1923 is considered by many scientists to be one of the first such works [1, 2].

Yet analysis of numerous literary sources (for example, see [3–11]) demonstrates that after all significance of the methodological principles in development of the scientific theories and practical application of their achievements, the planning principles are not a subject of a certain elaborate scientific analysis so far. In particular

among the principles of planning mentioned and discussed in the economic environment there are the principles with the definitions, which are not quite correct, lack unambiguity, vary with different authors, so their use as a structural tool for development of the planning systems at the enterprises becomes problematic. Thus, for instance, in [12] the principle of continued planning is associated with continuous control over fulfilment of the planned tasks and with their required review in case of changed internal and external conditions. This is inconsistent with the most popular interpretation of the principle in the scientific-and-methodological literature and to the greater extent complies with the flexibility principle [4, 5, 9]. Among the principles of planning attention is often drawn to the general scientific principles, which are obvious with the state-of-the-art development level of the scientific economic ideas, such as the principle of necessity and scientificity [5–7, 9]. Some principles duplicate one another not only in whole but also in certain aspects, not only any other principle but also several principles at the same time as is the case in the principle of end-to-end planning [26], on the one hand, and the principles of systematicity and hierarchy, on the other hand. Some principles differ from substantially similar principles only by designations. Concurrently the designations are not equivalent with regard to their strict meaning (for example, see the principles of adaptability, flexibility and elasticity which are almost equivalent by their content however not by precise terminology).

Elements of eclecticism, unambiguity of definitions of the principles, lack of their mutual ordering and consistency complicate effective use of the principles as the methodological landmarks while designing the systems of planning at the enterprises and substantiate necessity of their systematization based on the scientific analysis and system approach.

Statement of the purposes. The article is aimed at substantiation of the main planning principles of enterprise activities in general and business development including restructuring, particularly discovering the relations among the planning principles with identification of the primary, key planning principles and the principles that may be the methodological basis for design of the planning systems and development of the plan systems to ensure enterprise efficiency.

Description of the main study materials. The planning principles, being the methodological principles to carry out the appropriate activities, shall demonstrate the primary specific features of enterprise activities and external economic environment, planning as a major management function, specific character of organization of planning as a type of management activity. As the most important characteristic of any industrial enterprise as an object of management is its belonging to the economic systems, then it is appropriate to start analysis of all planning principles from the principle of systematicity.

Principle of systematicity (system approach). The all-purpose and common principle among all others referred to in the scientific literature in the context of the problem of planning is the principle of systematicity under which any item (object, phenomenon, etc.) is treated as a system. Then the system approach is defined as an approach implementing the principle of systematicity, i.e. an approach treating any relevant item, object, phenomenon as a system. Within the framework of this study the principle of systematicity is applicable for the object of planning, i.e. an enterprise, for the development process of the planning system, system of planning itself and the whole of plans as an ultimate product (result) of functioning of such system. In this regard the primary properties of the planning object are the system properties which dictate strictly defined requirements to the planning systems and plans developed whereby.

The content of both the principle of systematicity and system approach in itself is well-defined, based on knowledge of the main system attributes and is clear enough from the methodological point of view. At the same time subject to the high level of generality of the principle of systematicity and its basis on the equally similar notions it is rather complicated to comply with this principle in practice, in certain studies and developments. Consideration of adjacent and subordinate planning principles detailing the general principle of systematicity can contribute to it.

Principle of complexity (complex approach). One of the principles claiming to be of the same or, to the opinion of some scientists (see, for example, [5]), even higher degree of generality, is the principle of complexity. Analysis of its origin and modern interpretations demonstrates a number of unsolved issues, debatable matters, which make for not quite correct definitions of this term and lack of consensus with regard to its content which is characteristic of such situation.

The word “complex” (Latin *complexus*) originates from the Latin *complect-*, *complectere* meaning to embrace, encompass, include [13]. It appeared in the Russian language over a century ago to mean: (a) *homogeneous* population considered as a whole; (b) a set of *homogeneous* items or phenomena which form an integral unit; (*psychology*) a set of perceptions combined around any strong feelings [14].

In the modern English language the word “complex” is used in the following general scientific meanings: (1) a concept-based whole consisting of compound and interconnected parts; composite structure; the one consisting of the interconnected parts; the one having lots of various and independent however interconnected and interdependent components or parts coupled by variety of connections; (2) composite, complicated to understand [13, 15].

It is seen that the definitions in meaning 1 are intrinsically very close to the first simple definitions of the term “system” emerged much later with the spring and evolution of the systems theory (see the major work of the pioneer of the systems theory L. von Bertalanffy [16] and review of definitions of the system, for instance, in [17, 18]). Essentially these definitions may be qualified as a prototype of definitions of the term “system”. The mentioned fact allows for the term “complex” to be treated as a synonym of the term “system” and also considered as a more

general term in view of its higher uncertainty, indistinct nature as compared to the term “system” which has more exact definition of the notion depicted. In the latter case the complex is understood as a set of interconnected components, elements which are not necessarily a system. It should be noted that the above said is fully true with regard to the adjectives “complex” and “systematic”.

There is another point attributable to definition of the complexity as complication (with respect to the structure, comprehension) which enables differentiating the terms “complex” and “system, systematic”. With the focus on the feature of complication a simple system (as not every system shall be complicated) is not a complex. In its turn as it was noted above a complex is not necessarily a system, considered as a system.

Taking into account the above description of “system (“systematic”) and “complex” we can reply to the question if it is reasonable to differentiate the specified terms for purpose of the problem of enterprise planning. As the enterprise, being the object of planning, is a complicated system, the term of complexity contributes nothing new to such objects as compared to the term of systematicity and this demonstrates inclusion of the principle of complexity in the system of primary planning principles to be redundant and unreasonable. The said is also true for the planning systems as management systems.

Principle of hierarchy. One of the features of any system is *hierarchy* that enables to treat any system as a hierarchized whole of sub-systems of the lower levels [17–19]. This feature is used as the basis to prove the required application of, particularly, the hierarchy principle in management and planning as one of the main methodological principles for development of the planning systems and system of the development plans for the enterprises including the plans of restructuring.

With regard to the problem of planning of enterprise restructuring the author of the work [11] proves time-frame feature (planning horizon) to be the major feature of structuring the plan system which enables to differentiate strategic, tactical and operational planning; type of enterprise activity (function) (manufacturing of products, material and technical supply, product sales, HR management, production management, etc.) and the decomposition method to be the major tool for making up the plan hierarchy.

It is easy to see that the hierarchy principle of the planning system and system of plans is derived from the principle of systematicity and is subordinate to it.

As the principle of hierarchy is all-purpose, it may be applied to any component and any aspect of the system (plan) including time (see the principle of time definiteness).

Principle of time definiteness of the plans. The principle addresses the need to consider another fundamental feature of the planning object – a feature of *dynamism* of the economic systems and enterprise as a system in particular. This feature refers the enterprises to a class of dynamic systems having all dynamic features inherent with such systems. One of the fundamental notions which characterizes the dynamic systems, is system *behavior* understood as regular variation of the system *state*. In accordance with the time definiteness principle every (planned) state and activity of the enterprise as well as any other components of the plan shall be defined in time, i.e. correlated with the time axis.

As well as the principle of hierarchy the time definiteness principle is referred to the system-wide principles of the same (second after the principle of systematicity) order. At the same time the said principles are closely connected. Thus time definiteness shall be inherent with all plans of the system irrespective of the hierarchy level of the plans and the principle of hierarchy shall also cover time characteristics of the plans. The latter means that all plans of the system shall be hierarchized according to the specified (time) characteristics.

Principle of continued planning. In the modern theory of planning this principle is recognized as one of the fundamental principles. At the same time the issues about the reasons of its required application in planning, its interrelations with other principles and features of the planning objects are not fully discovered.

The requirement to follow this principle in elaboration of the development (restructuring) plans, to our opinion, is preconditioned not by dynamism of the economic systems, their adaptability and capability to develop in the changing environment but a *factor of uncertainty* of the prospective business environment of the enterprises, their operation process (including the development processes) and finally the plans themselves. In the latter case uncertainty is understood as inaccuracy of the plans and the factor of uncertainty – as an objective impossibility to develop accurate plans even for absolutely predictable conditions. Just because of the factor of uncertainty it is required to review plans on a systematic basis and this was reflected in the principle of continued planning.

As with the principles of hierarchy and time definiteness the principle of continued planning is referred to the principles of the second level.

Essentially the whole range of the planning principles duplicate, specify or uncover the implementation mechanisms of the principle of continued planning. The principles of flexibility, adaptability, elasticity of the plans as well as the principle of rolling planning shall be referred to such principles.

Principle of flexibility. This principle originally suggested by Henri Fayol in his book “General and industrial management” back in 1916 [1, 2] assumes possible revision of the plans for any reasons demonstrating appropriateness of such review. As only those changes of the plans may be appropriate, which are the relevant response to changes in state of the factors considered at the time of plan development, the flexibility principle of planning is identical to the **principle of adaptability** where the term “adaptable” is the most representative of the content of this principle and the principle itself is representative of the fundamental feature of the systems i.e. adaptability.

The term “**principle of elasticity**”, which almost coincides with the term “principle of flexibility” and “principle of adaptability” in terms of the content in the economic literature, shall be recognized as failed by itself.

First and foremost elasticity in economics has a quite definite meaning and characterizes a measure of sensitivity of one value to changes in the other value. If one generalizes this term for any interconnected objects, items including plans and factors determining them, even in this case elasticity (as a measure) and subsequently the principle of elasticity as an independent principle of planning are not very informative as long as the exact definition is given to elasticity of the plan.

Secondly if one reads elasticity as a term with general scientific (usually physical) meaning of capability of an object to withstand significant (elastic) deformations under influence of relatively minor force applied *without failure* [20], then in this case the principle of elasticity shall render the relevant requirement to the plans i.e. it shall postulate capability of the plans, *undergoing changes*, to “withstand” certain changes in state of the factors considered at the time of plan development. However under the condition “*undergoing changes*” the content of the principle of elasticity is reduced to that of the principle of adaptability, thus changing the term “principle of elasticity” into a synonym of the term “principle of adaptability”. If one declines this condition and postulates ability of the plans “to withstand” changes of internal and external business environment of the enterprise *in unchanged condition*, then (a) there is no sense to use the term “elasticity”, and (b) in this case there is a standard term, which is widely used, particularly, in the decision theory under the conditions of uncertainty [21–24]. This is the term “*sustainability of plans*” which denotes the relevant notion.

Based on the above said one may conclude that the adaptability principle of planning (plans) discloses *intended function* of continued planning which provides for adaptation of the plans to changed circumstances or assumed changes of circumstances and thus is subordinate to the principle of continued planning. In its turn review of the implementation mechanisms of the adaptability principle of the plan enables to define the principles of the next, lower order of generality. Examples of such principles may be the redundancy principle which provides for the reserves for any unexpected deviations from the plan; the principle of contingency planning which provides for development of not one but several alternative plans the choice whereof is conditioned by the actual situation, etc.

Principle of rolling planning (rolling plans). As opposed to the principle of adaptability this principle illustrates a strictly determined *mechanism of facilitation* of the principle of continued planning. In fact one of such mechanisms is development of the next plan at the time when the (planned) period of the previous plan terminates. Therefore at any time there is a valid plan for the object of planning which covers the present moment of time. And such situation complies fully with the above definition of continued planning.

The principle of rolling planning provides for the other mechanism of plan change. Its content is well illustrated in Figure 1.

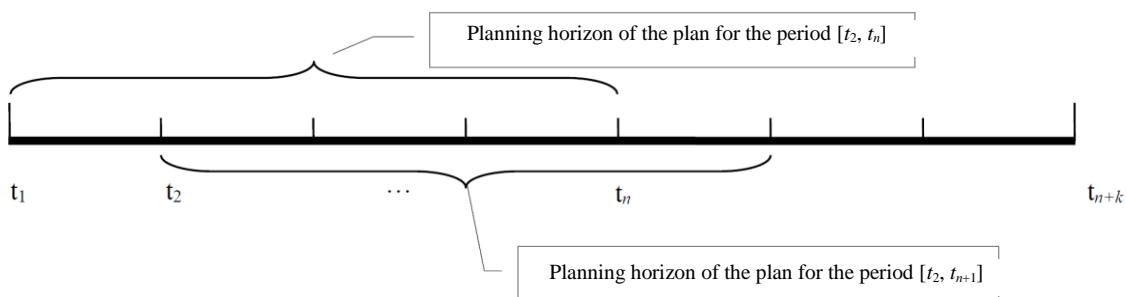


Fig. 1. Time structure of adjacent plans in the system of rolling planning

The scheme well demonstrates that the plan of the first planned period calculated as of the time point t_1 upon expiration of the time, which equals to the planning step $\Delta t = (t_2 - t_1)$, is substituted with the next plan of the planned period of the same duration ($n \cdot \Delta t$) by the time point t_2 .

Thus the shown mechanism of facilitation of continued planning predetermines more delicate implementation of the principle of adaptability of planning and plans as compared to the aforementioned mechanism. Indeed the systems built on the principle of rolling planning enable earlier, before the end of the plan of the previous period and therefore the end of the whole planned period, to detect and address changes arisen (discovered) within the first sub-period of the previous planned period in a new or rather revised plan.

As well as the principle of adaptability the principle of rolling planning is subordinate to the principle of continuity.

Principle of succession of the plans. This principle can fully approve itself within the framework of rolling planning both at the level of methodology and methodological implementation. Moreover efficiency of compliance with this principle results from compliance with the principle of rolling planning. We are going to provide the most essential arguments to the advantage of this statement.

The content of the succession principle is easily illustrated in Figure 1. The scheme demonstrates that the plan calculated at the next time step differs from the previous plan by the fact that a new sub-period, which is the

last one for the planned period, is included into the planned period covered by this plan. In case of any crucial changes the plan shall be re-calculated for all preceding sub-periods, and the plan shall be calculated for the first time for the period in question.

It stands to reason that the “price” for the changes introduced into the re-calculated parts of the plan may be different in the context of planned purposes, planned figures and from the point of view of performers. The terms *parametric and structural adaptation* [25] are used to explain this statement. Say the new plan involves some changes in production output, inputs of any resources, etc. Such changes address changes only in *parameters* of business activities. However the new plan may provide for failure to manufacture some products or vice versa start-up of new, though conventional for the enterprise but not manufactured for some time, products, failure to carry out previously planned activities and inclusion of new activities in the plan. Such changes are of structural nature, require a number of mutually causal changes and therefore are considerably more painful in general than parametric changes.

Instinctively it is also understood that “smoother”, more “gradual” changes in the plan, particularly large scale changes, more remote against the current time may be easier “worked out” by the system (enterprise) in whole (in view of certain time reserve available) and easier perceived by enterprise employees, performers of the plan psychologically. Observed here is complete correspondence with the phenomenon (mechanism) of cash flow discounting which represents influence of time factor on the cash flow value. As with cash flow discounting in the financial mathematics, there are tools to provide for plan succession in the theory of optimal planning, particularly the method of penalty function under which changes in the plan are penalized and the amount of penalties may depend also on the time sub-period of the planned period to which the relevant changes are connected.

The principle of succession of the plans, in this case the plans of adjacent time periods, assumes obligatory consideration of all above mentioned circumstances when developing such plans. In the above meaning this principle is practically similar to the **principle of plan stability** which claims invariability of the main guidelines of the plan. However, to our opinion, the term “stability” discloses the content of the requirements, which this principle involves, with a lesser degree of accuracy than the term “succession”.

With this interpretation it is apparent that the principle of plan succession is subordinate to the principle of rolling planning.

Principle of non-contradiction (consistency) of the plan system. The principle immediately results from the principle of systematicity. However compliance with the principle of non-contradiction, fulfilment of its requirements is relevant if the principles of hierarchy and continuity (particularly the principle of rolling planning) are implemented.

In view of the hierarchy structure of the plan system and system approach to development of the plans on the basis of sequential decomposition of the plans of higher levels into the plans of lower levels, provision of mutual consistency of the plans of all hierarchy levels is a crucial task. Moreover consistency of the plan system is an obligatory requirement of the system approach under which fulfilment of all plans of the lower hierarchy level shall ensure (be equivalent) fulfilment of all plans of the higher intermediate levels and the plan of the highest level in whole. There is no point to build the system of plans if this requirement is not met.

The principle of non-contradiction suggests consistency of the plans of adjacent time periods and different hierarchy levels which results from the continued planning, substitution of the plans of some time periods with the plans of the following time periods.

In view of the above given beliefs about the key (primary) principles of planning and plan systems some principles of planning mentioned in the economic literature appear to be duplicating, specific, not sufficiently informative and trivial or debating. Let us study the best known of them.

Principle of end-to-end planning means creation of the system of interconnected plans which provides for consistent operation of all enterprise units [26]. The requirements of this principle are implemented with compliance with the principles of systematicity, hierarchy and consistency of the plans, which definitions are more specific, rigorous and clear, and this makes it inappropriate to include this principle in the system of primary principles of planning.

Principle of necessity assumes required planning of any activities [8, 9]. Lack of the plans involves unpredictable consequences and does not guarantee efficient operation of the economic system. Given that the required planning of the economic activities was recognized not only by scientists but also practitioners as far back as a century ago and it is not appropriate to bring the required planning to the level of the principle of planning itself because of its apparent nature.

Principle of scientificity (scientific approach). The principle of scientificity means required application of the scientific approach to solution of the tasks set, i.e. application of scientific knowledge and methods to solve the problems, and assumes scientific validation of the plans, etc. [5–7, 9]. Like the principle of necessity, the principle of scientificity is evident in the modern society and, particularly, economy. It carries no specific requirements with regard to the problem of planning and therefore its inclusion in the system of planning principles does not enlarge the whole of fundamental requirements and conditions placed to the planning systems and systems of plans.

The sure thing principle, principle of prescriptivity (of the plans) is also designated as evident. Indeed why developing the system of plans, if their obliged fulfilment is not involved. In this respect it is only appropriate to raise an issue about the mechanisms of plan fulfilment including the stimulating mechanisms for fulfilment and

responsibility for non-fulfilment of planned tasks. However this issue is referred to management and extends beyond the principles of development (building) of the planning systems and system of the plans.

The principle of optimality (efficiency, economic feasibility, rationality, marginality). With regard to the plans this principle postulates required choice of the optimal (rational, efficient) plans. The requirement of optimality is totally inherent in the decision theory, scientific economic environment and it may be pertinent only as a reminder for those who tend to avoid using more complicated approaches to plan development, for instance, the optimization approach, to save costs for development of the planning systems. Being the principle for development and operation of the planning systems, the principle of economic feasibility (efficiency) is also rendered as follows – costs for development and implementation of the planned function shall match the general economic effect of operation of the planning system [3, 9]. However with this interpretation the principle is true for any activities and results of any activities and is quite evident.

Principle of unity and entirety. In its general representation (as a principle involving development of a single plan for the enterprise which summarizes all plans of the business units) this principle (and essentially these are two interconnected principles: principle of unity and principle of entirety of the plans) almost fully duplicate the principles of hierarchy and non-contradiction in some aspects and therefore does not convey any additional meaning as a part of the above primary principles.

Principle of purposefulness (consistency of aim, appropriateness). This planning principle means that a plan shall be aimed at achievement of the goals set [10]. However, some scientists also read this principle as shared purposes and resources [27]. The second interpretation will be considered below with regard to the principle of the resource-balanced plans. Also it should be noted that within the framework of the plan concept, which is elaborated by some scientists (for example, see [11, 28–30]), which the author of this study also holds to [31, 32], and under which a purpose (purposes) is an integral part of the plan which activities are aimed at achievement of the purpose, this principle is not required within the meaning of the term plan itself and the term planning as its direct outcome (as a process of plan development).

Principle of the resource-balanced plans. As in the previous case the resource-balanced requirement of the planned activities results from the definition of the plan and from the principle of systematicity. In other words, a plan not supported by the resources is not the plan; it is non-thing even if called the plan. So there is no need to emphasize this characteristic of the plan as an independent principle of planning.

Principle of specificity. This principle, which is sometimes mentioned as the principle of specificity and measurability of the plans, assumes that all components of the plan (purposes, activities, resources, time limits, performers, etc.) shall be represented clearly and unambiguously, shall not contain too general (abstract), ambiguous, hardly explained provisions and values. Being one of the most common and all-purpose principles this principle truly takes the place at the highest level of hierarchy among the planning principles.

Principle of multi-functionality means that planning shall cover all functions exercised by the object of planning. This principle is fully merged in the principle of systematicity, automatically implemented in the structuring process of the hierarchy of the plans and, to our opinion, does not have an independent meaning in planning.

Principle of coordination (activities of the business units of the same level shall be planned simultaneously and in connection with one another) as well as the principle of multi-functionality may be referred to those principles which are implemented automatically subject to compliance with the principle of systematicity and this also precludes appropriateness of inclusion of this principle in the system of the main planning principles.

Principle of accuracy and detalization provides for the plans to be accurately designed in accordance with the planned efficiency in achievement of the goals set. Essentially this principle duplicates the principle of hierarchy or, in other words, is realized with the principle of hierarchy, under which the higher level of detalization (accuracy) of all components of the plan is stipulated with lowering the hierarchy level of planning and transition from the plans of the strategic level to the tactical and operating plans.

The idea of both mentioned principles (in connection with the principles of continued planning) is vividly expressed in car driving where to drive effectively it is required to have a general idea of the traffic with a large viewing angle and range of vision together with quite exact, detailed picture of the nearest surroundings at the distances allowing for prompt, correct and quick reaction of the drive in the current situation.

Principle of the identified guide link. In the system of the planning principles this principle looks like a rudiment coming from the era of manual planning methods. Even notwithstanding the modern definitions thereof (as a necessity to identify priorities in development of the enterprises), the principle of the identified guide link is automatically realized in using the up-to-date methods of aim setting (for instance, see [28, 33, 34]) and optimal planning.

Principle of participation. This principle, which involves every business unit of the enterprise, every employee in the process of planning to ensure quality and efficiency of planning, is referred to organization and management of planning and does not deal with the fundamental structural features of the plan system. Considering the above and not addressing the relevancy of the principle itself, this principle may be considered as one of the auxiliary general principles of organization and operation of the planning system.

Thus the above analysis provides for arrangement of the most frequently used planning principles and their relations as shown in Fig. 2 and for characterization of the role and position of every principle in the system of the planning principles.

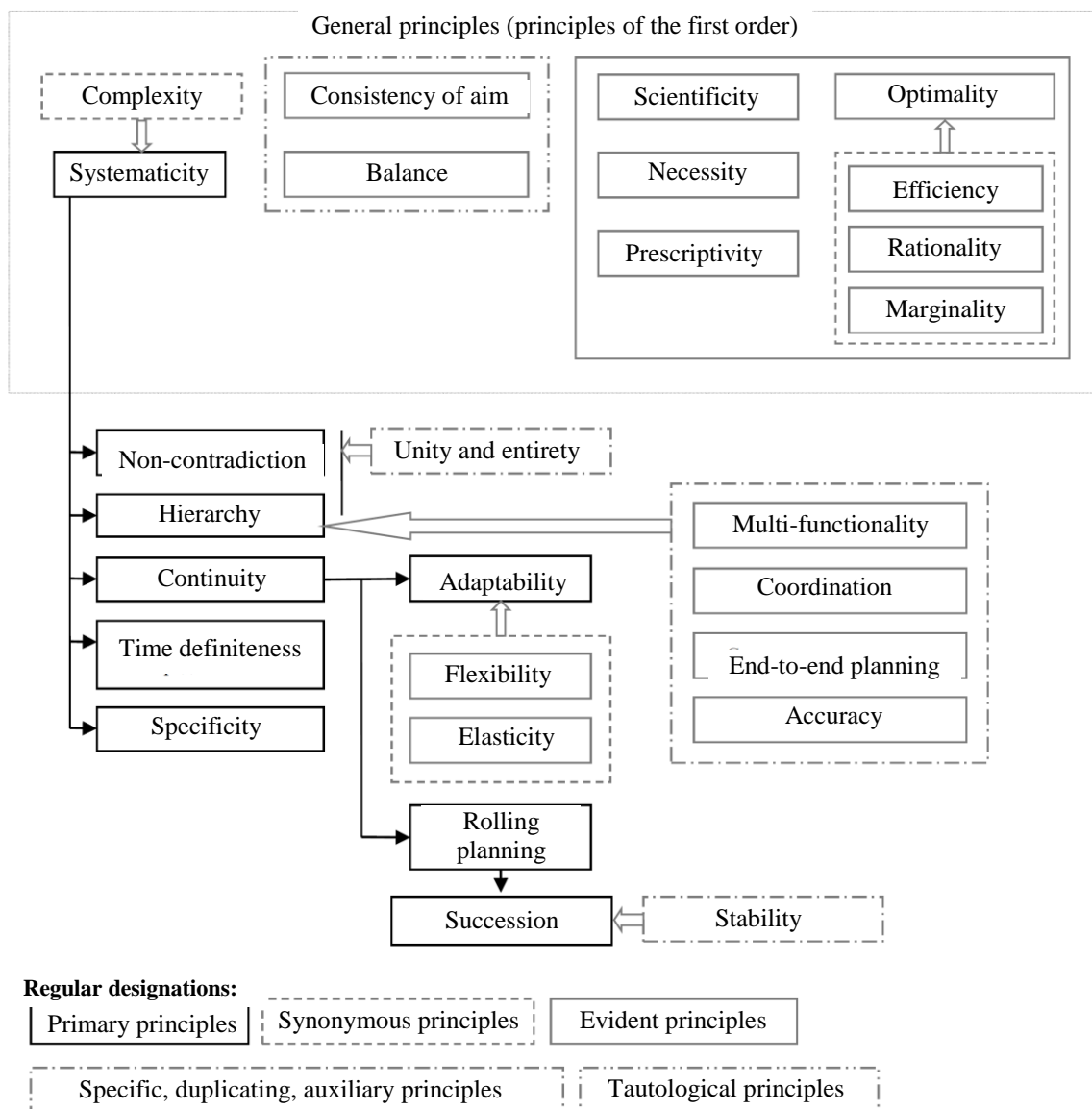


Fig. 2. Main principles of planning and their relations

Conclusions. The planning principles of enterprise activities, which, like other scientific methodological principles, exercise an integrating, synthesizing and organizing function in the relevant scientific field, establish general requirements to the development process, structure of the planning system and composition of the plan complex. This poses certain requirements to the system of the planning principles itself. And the key requirements are accurate and unambiguous definitions, representation of the main regularities of the planning object and planned activities, rules of organizing such activities, internal consistency and entirety of all principles.

Analysis of scientific and educational literature demonstrates a great deal of statements, which are brought by scientists to the level of the principles of planning, usually, however not always, rather informative definitions of these principles and explanations to them. Though at the same time the issues related to establishment of the integral system of such principles, their interrelations, propriety of the need to consider relevant statements as methodological principles to be elements of the single system of the planning principles are practically not studied.

This study, within the framework of the system approach to analysis of the problem of justification of the planning principles, demonstrates that among the principles discussed in scientific and methodological literature there are the principles with debating definitions and even designations; some principles duplicate one another; some principles result from the others, etc. Lack of systematicity in this matter essentially limits possible execution of the methodological, organizing, guiding function of the principles which cannot but have adverse effects at the methodological level of establishment of the planning systems and plan development.

A great deal of the well-known planning principles is systematized; the primary, key principles are distinguished among them; the principles, which inclusion in the system of the planning principles is not appropriate, and the reasons of such decision are identified; hierarchy of the main principles of planning is built.

Follow-up of this study in development of the concept of hierarchical continued planning of restructuring of industrial enterprises is elaboration of certain mechanisms of implementation in accordance with the suggested system of principles.

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