Chapter 5
NATIONAL RESILIENCE ENSURING SYSTEM ESTABLISHMENT IN PRESENT-DAY UKRAINE

Strengthening national resilience is a priority of public policy in the field of national security in Ukraine. This is driven by the need to provide preparedness of the state and society to respond to a broad spectrum of threats of various origins, as well as to ensure continuity of the key processes in the country. Ukraine has considerable resilience potential, which is particularly confirmed by its experience in countering Russia's hybrid aggression. However, augmentation of security and defense force capabilities alone is not enough to build a full-fledged national resilience ensuring system in Ukraine. The appropriate systemic mechanisms are in their initial phase. Their establishment will foster reinforcement and development of the national security ensuring system of Ukraine. The selection of the general national resilience ensuring model should be based on the consideration of national interests, the needs for the state and society development, and specifics of Ukraine's security environment. The development of public policy in this area requires definition of goals, objectives, and guidelines along certain periods, as well as universal and special national resilience ensuring mechanisms, taking into account the regularities due to implementation of the resilience concept in the field of national security.

5.1 Conceptual Framework of National Resilience Ensuring in Ukraine

Considering the significant number of threats faced by Ukraine, the inadequacy of its national security ensuring system and public administration, as well as multiple vulnerabilities in the state and society, it would be expedient to

establish an additional protective mechanism to strengthen resilience of the state and society. This concerns the multi-level comprehensive national resilience ensuring system related to the national security ensuring system of Ukraine. The conceptual framework for establishing a national resilience ensuring system in Ukraine can be determined by taking into account the results of security environment analysis, vulnerabilities of the Ukrainian state and society, and the regularities generated from the specifics of resilience concept implementation in the sphere of national security.

Vision. The national resilience ensuring system, which was developed on the basis of national interests and in consideration of the best world practices, functions on a permanent basis. This system is organized and operates at national, regional, and local (level of territorial communities) *levels*. Uniform resilience ensuring principles, processes, and mechanisms have been introduced at all levels.

The conceptual, terminological, methodological, organizational, resource-related, and other issues have been accommodated by Ukrainian legislation. Uniform standards, recommendations for ensuring national resilience, and adaptive management principles have been introduced and regulatory acts related to national security, civil protection, crisis management, strategic planning have been improved in consideration of national resilience and sustainable development principles. Coordination and coherence of effort of all actors at all phases of the national resilience ensuring cycle have been established. The elements of institutional and organizational support of the system include the following:

- national coordinator and the structure of its auxiliary bodies;
- general framework for distribution of powers and responsibilities of state authorities in their assigned national resilience ensuring areas;
- national network of competent public authorities and scientific institutions for strategic analysis and resilience related issues;

- standing organizational formats (entities) for cooperation between central and local authorities, non-governmental organizations, private businesses, and international partners regarding national resilience ensuring issues (at national and local levels).

The following function on a permanent basis:

- comprehensive national risk assessment system, which also includes crises projection and simulation, assessment of capabilities, identification of threats and vulnerabilities, visualization and dissemination of obtained results, and the monitoring and revision of risk assessments;
- systems for early threat detection and prevention based on an integrated network of situational centers and crisis management;
- regional and local resilience development networks and security centers.

Regular inter-agency exercises, training events involving the population, and other events to raise awareness and improve preparedness in responding to the broad spectrum of threats and crises are in place. Threat and crisis (including emergency) response and recovery plans are developed. The necessary and readily available reserves and capabilities across different areas have been established.

The functioning of the national resilience ensuring system provides for:

- a comprehensive approach to responding to a broad spectrum of threats and crisis situations at all stages of their deployment (monitoring, analysis and evaluation, planning of efforts, prevention, mitigation of potential consequences, countering, recovery);
- effective cooperation between government authorities (national security and the defense sector, as well as others), including real-time mode of applying advanced technologies, active engagement of communities, businesses,

population in the joint threat prevention and response processes and relief efforts, and also coordination of such activities;

- high level of awareness of the population and officials regarding the character and relevance of threats, crises and other hazards, as well as appropriate action plans. This requires the promotion of necessary knowledge and skills among central and local authority representatives and population with regard to current and anticipated threats and response thereto, and building a safety culture in society;
- preparedness of the state and society to respond to any threats and ability to resist. This primarily concerns building appropriate capabilities and a coherent action plans in the case of a threat, or crisis (including emergency) occurrences, and recovery thereafter, appropriate exercises and training sessions;
- continuity of key processes supporting vital functions in society and state (governance, crucial services for society, business processes, and more);
- reliable and permanent channels of two-way communication between the government and the population, including continuously informing society of the evolving situation and measures that have been implemented with consideration of strategic communication objectives.

Mission. The main purpose of the national resilience ensuring system of Ukraine is to create (or enhance) the necessary capabilities and abilities of society and state to counter threats of a broad spectrum, to adapt to changing security environments, and to maintain sustainable operations, including through elimination of vulnerabilities, and to promptly recover after crises toward an optimal level of balance in the specified conditions.

Conceptual approach. Currently, Ukraine faces high level risks and threats practically in all spheres: internal and external, social, economic, political, military, and ecological. Multiple vulnerabilities exist due to an insufficient level of society consolidation, ineffective public administration,

incomplete security and defense sector reform and decentralization processes, and systemic deficiencies in the national economy. Therefore, the conceptual principles of national resilience ensuring in Ukraine should be based on a broad approach and extend beyond the mere establishment of an effective crisis management system on the basis of civil protection and providing security for critical infrastructure facilities (Reznikova & Voytovskyi, 2020).

The emergency in Ukraine, caused by the COVID-19 spread, actualized the issue of strengthening national resilience, including the development of an appropriate legal framework and organizational system, as well as ensuring the government and society preparedness to respond to a broad spectrum of threats of different origins and continuity of main processes in the country (Reznikova, 2020b). Enhancement of economic and societal resilience, particularly with regard to information and other destructive influences, and also resilience of local communities and regions, is vital for Ukraine in the current circumstances. An important lesson of the COVID-19 crisis is that the implementation of anti-crisis measures should take into account all potential effects, including those that may have negative results from such measures, and that planning should be more flexible under uncertainty.

Key definitions. The launch of a number of new processes relating to building national resilience requires a uniform glossary of terms in the sphere of national security and resilience to be developed and introduced. This requires consideration of commonly accepted understanding of the national resilience concept and of the practices existing globally and in Ukraine (Reznikova & Voytovskyi, 2021). Taking into account the theoretical foundations, as described in the above chapters of this monograph, the definitions of “adaptability,” “preparedness of the state and society,” “hybrid threats,” “crisis,” “national resilience,” “national resilience ensuring mechanism,” “capabilities,” “resilience in certain spheres,” “national resilience ensuring actors,” “vulnerability,” and “national resilience ensuring cycle” have been developed (see the Glossary).

It would be expedient to create a national website to publish the commonly recognized national glossary of terms in national security and resilience spheres, and sectoral glossaries, including the ones relating to emergency management, as well as appropriate information and analytic papers. This will support consistency and conformity of terminology, common understanding of key terms and linkages between definitions, and will reduce the risk of communication errors.

National resilience ensuring principles. Considering the specifics of applying the national resilience concept in the sphere of national security, it is necessary to set forth the key principles based on which factor of the national resilience ensuring system of Ukraine should be built, such as comprehensiveness, inclusion (broad interaction), predictability, reliability, awareness, readiness, mobility, adaptability, redundancy, continuity, and subsidiarity.

The key national resilience ensuring areas. Considering the results of Ukraine's national security environment analysis, the existing vulnerabilities of society and the state, and problems with ensuring national security and resilience, the following key areas of providing national resilience in Ukraine can be identified:

- continuity of governance, including guaranteed efficiency and ability of authorities to perform their functions, and their organizational resilience;
- safety and security of critical infrastructure facilities, including
  - continuous operation of food, water, and energy supply systems;
  - continuous operation of transport systems, including providing prompt movement in crises;
  - cybersafety and cybersecurity of critical infrastructure facilities;
  - secure and continuous operation of communication systems;
  - ability of the healthcare system to operate under increased stress, including pandemics or high-casualty situations;

- civil protection in case of a threat, crisis, or emergency;
- ability to effectively respond to uncontrolled massive relocation of people;
- societal resilience, in particular, to information influences;
- financial and economic resilience, including continuity of major business processes and supply chains.

Other national resilience ensuring areas relevant for Ukraine include building resilience against destructive external influences, updating the conceptual framework and applying new counter-terrorism practices, and ensuring societal and national security. In general, it is expedient to implement resilience ensuring principles and mechanisms across all sectors and areas of activities. This is already happening in some areas, such as cybersafety, cybersecurity, and financial management.

Development of *education* takes on greater importance within the context of national resilience, including the training of personnel for security and the defense sector of Ukraine. Promotion of knowledge concerning up-to-date risks and threats and shaping *societal safety culture and models of responsible behavior* in society should start in pre-school and last a lifetime. Organization of training programs by authorized state bodies, output and distribution of visual products, training sessions for target audiences, and establishment of two-way channels of communication – all of these are crucial in ensuring preparedness of government and society to respond to threats and crises and further recovery.

Ukraine's security and defense sector authorities should focus more on increasing human capital at all phases, including selection of personnel, training, and purposeful occupational and refresher courses. Special focus should be on the motivation, professional relevance, appropriate patriotic education of employees, and continuous improvement of skills (Siomin & Reznikova, 2017). In addition, advancing cutting-edge technologies in the sphere of national

security and resilience, including in the areas of cybersafety and cybersecurity, risk assessment and crisis simulation, require high-skilled personnel in different areas to be employed in security and defense sector.

The list of key areas regarding ensuring national resilience should not be final, it should be revised and extended according to the evolving security situation.

Key functions of the national resilience ensuring system. Considering the clauses of paragraph 47, the National Security Strategy of Ukraine 2020 (President of Ukraine, 2020b), and the conclusions presented above in this monograph, the key functions of the national resilience ensuring system in Ukraine should be defined as follows:

- assessment of risks, identification of threats and vulnerabilities, evaluation of capabilities and level of preparedness of the government and society to respond to threats;
- prevention of threats, minimization of negative influences, and mitigation of the impacts of threats or crises;
- providing preparedness for state and local authorities, institutions, enterprises, organizations, communities, civil society, and the population to respond to any threats and crises;
- ensuring adaptive management, including flexible planning and effective crisis management, particularly via the implementation of protocols of concerted actions to respond to threats, emergencies, and crises; recovery to reach at least the pre-crisis level of quality of life and functioning of the vital areas of society and the state activities; mandatory revision of plan based on the results of analysis of the dynamic of key parameters of the national resilience ensuring system and of security environment changes;
- establishment of effective coordination and clear cooperation between security and defense sector actors, other government authorities, local

communities, businesses, civil society, and population in terms of prevention and response to threats and dealing with the consequences of crises;

- promotion of necessary knowledge and skills in the sphere of national security and resilience and shaping security culture in society;
- establishment and maintenance of reliable channels of communication between government authorities and the population;
- development of international cooperation on resilience related issues.

Expected results. The establishment and implementation of the national resilience ensuring system in Ukraine will help:

- to improve effectiveness of national security ensuring system and public administration;
- to ensure appropriate level of preparedness of the state and society to respond to threats to national security and crises of various origins at all phases of their deployment;
- to provide effective cooperation between all national resilience ensuring actors;
- to improve effectiveness of crisis management in the state;
- to reduce human, material, and financial losses in the case of threat or crisis of any type occurrence;
- to consolidate society and increase the level of public trust in the government;
- to increase capacity of local communities, develop local self-government in the context of preventing and countering threats and crises;
- to save the state's resources through their consolidation and efficient use;
- to enhance international cooperation, share lessons learned in the sphere of national resilience, and strengthen integration of Ukraine into the Euro-Atlantic security system.

It should be noted that these conclusions and recommendations were primarily incorporated into the Concept of Support of the National Resilience System, approved by the President of Ukraine (2021g).

5.2 Organizational and Legal Framework of National Resilience Providing in Ukraine

The formation of the national resilience ensuring system is a challenging mission, requiring the involvement of a broad network of government institutions, organizations, and numerous experts. Therefore, the primary definition of conceptual framework of this process will provide a shared vision of issues and objectives to be tackled, as well as the principles of a functioning of the relevant system.

The Concept of Support of the National Resilience System, approved by the President of Ukraine (2021g), is the foundation for systemic mechanisms and other regulatory documents in the subject area. In particular, the laws of Ukraine should specify the responsibilities of national resilience ensuring actors, and other legal documents will outline the requirements, recommendations, criteria, and indicators to evaluate the basic elements of the national resilience system.

Shaping such a legal framework provides for the drafting and adoption of a number of regulatory acts, including:

- amendments in legislative acts of Ukraine, such as the Law of Ukraine (2013a, 2018), and other regulatory documents concerning the organizational mechanism of a national resilience ensuring system, distribution of responsibilities, and coordination of relevant efforts;

- introduction of practices and methodology of risk assessment and identification of threats to national security, evaluation of existing capabilities and identification of vulnerabilities at national and regional (local) levels, as well as deciding on the formats for sharing the appropriate results;

- adoption of the Law of Ukraine on strategic planning, amendment of the Law of Ukraine "On National Security of Ukraine" and the Budget Code of Ukraine to establish a holistic strategic planning system with consideration of the budget process;

- amendment of legislative acts of Ukraine regarding planning in the spheres of national security, including improvement of joint action planning in the case of crises with complex cascading effects and the introduction of universal protocols for concerted response to threats and crises at different stages of their deployment;

- designation in Ukraine of regional and local coordination bodies for ensuring resilience of regions and local communities, establishment of organizational formats of broad cooperation at local levels operating on a permanent basis, and description of their powers in appropriate areas;

- installation of mechanisms to stimulate scientific research, building up of public-private partnerships in the sphere of national security and resilience, including description of obligations of public and private partners;

- designation of procedures, channels, and formats of information sharing between national resilience ensuring actors concerning current and expected threats, early signals of threats identification, the status of appropriate capabilities, identified vulnerabilities, as well as prevention, response, and post-crisis recovery plans, mechanisms, and procedures;

- identification of relevant target audiences and the introduction of the practice of regular exercises and training in the area of ensuring preparedness, and the response to threats and crises.

Currently, the expert community holds discussions on the expediency of drafting a specific basic law on ensuring national resilience as a basic law in the appropriate area. It should be noted, that the most critical issues concerning cooperation between the government and businesses in the area of providing security and protection of critical infrastructure, and definition of their

responsibilities are regulated by the Law of Ukraine "On Critical Infrastructure" of 16 November 2021, No 1882-IX[1]. The remaining issues in the sphere of ensuring national resilience, including designation of powers and distribution of responsibility of actors, can be regulated through amendments in a number of subject-matter laws of Ukraine and appropriate decisions of the National Security and Defense Council [NSDC] of Ukraine and resolutions of the Cabinet of Ministers of Ukraine. In addition, the process of cooperation between national resilience ensuring actors should be determined in appropriate regulatory acts of Ukraine, including protocols of concerted actions setting forth universal threat and crises response and recovery procedures (algorithms). Thus, considering the above, drafting a separate law on ensuring national resilience is not expedient.

The approval of the Concept of Support of the National Resilience System should be followed by a duly developed and endorsed action plan to support its implementation. Considering NATO recommendations, adopted by the 2021 Brussels summit, this plan should set out the appropriate goals and objectives, and include clear guidelines and their achievement indicators. In addition, the national resilience ensuring actors should incorporate the appropriate objectives and activities in sectoral strategies and concepts, relevant national and local level programs and plans outlining the key areas and tasks concerning the development and implementation of public policy in the fields of their responsibility.

A particular focus should be on the *organizational mechanism of the national resilience ensuring system,* mainly on coordination of appropriate efforts. As mentioned above, the distribution of constitutional powers between different institutions in Ukraine complicates the establishment of holistic functional national security and the resilience ensuring system, managed by an

[1]Law of Ukraine. *Pro krytychnu infrastrukturu* [On critical infrastructure]. Law of Ukraine, 16 November 2021, № 1882-IX. Retrieved from https://zakon.rada.gov.ua/laws/show/1882-20#Text

integrated center, thus creating inconsistencies and risks for the reliability of system organization and its balance.

Therefore, effective coordination of national resilience building efforts requires a clear format of cooperation between the Cabinet of Ministers of Ukraine and NSDC of Ukraine. The role of the Secretariat of the Cabinet of Ministers of Ukraine and the Staff of NSDC of Ukraine in coordination of activities in the field of national security and resilience should be enhanced, and special offices responsible for appropriate issues should be established within the structure of these bodies (Reznikova, 2020a).

Considering the distribution of constitutional powers between different branches of power in Ukraine and with regard to international practices, the mechanism of coordination of national resilience building efforts at the strategic level should be formed according to the conclusions below.

1. Considering the cross-cutting nature of resilience concept for ensuring national security, and the fact that the National Security and Defense Council of Ukraine is responsible for coordination in the sphere of national security, the NSDC of Ukraine should provide the overall coordination of state policy in national security and resilience.

2. Since material, financial, and organizational capabilities are mostly concentrated in the executive branch of power, the Cabinet of Ministers of Ukraine should be responsible for the coordination of efforts of all potential participants in crisis management, including at the stage of ensuring preparedness to respond to the broad spectrum of threats and crises of different origins.

3. According to the Law of Ukraine (2013a), the Cabinet of Ministers of Ukraine establishes the State Commission on Technogenicand Environmental Safety and Emergencies to coordinate activities of central and local executive authorities, enterprises, institutions, and organizations in providing Technogenic and ecological safety, protection of population and territories, prevention and

response to emergencies. According to the Cabinet of Ministers of Ukraine (2015), this State Commission is chaired by the Prime-minister of Ukraine. Therefore, the powers of this State Commission should be extended to include comprehensive planning of security measures at all phases (prior to, during, and after the crisis), and generation of necessary capabilities, as well as coordination of efforts in the sphere of ensuring security and the resilience of critical infrastructure. This can be a way to transform the State Commission on Technogenicand Environmental Safety and Emergencies into a governmental body for national resilience ensuring coordination.

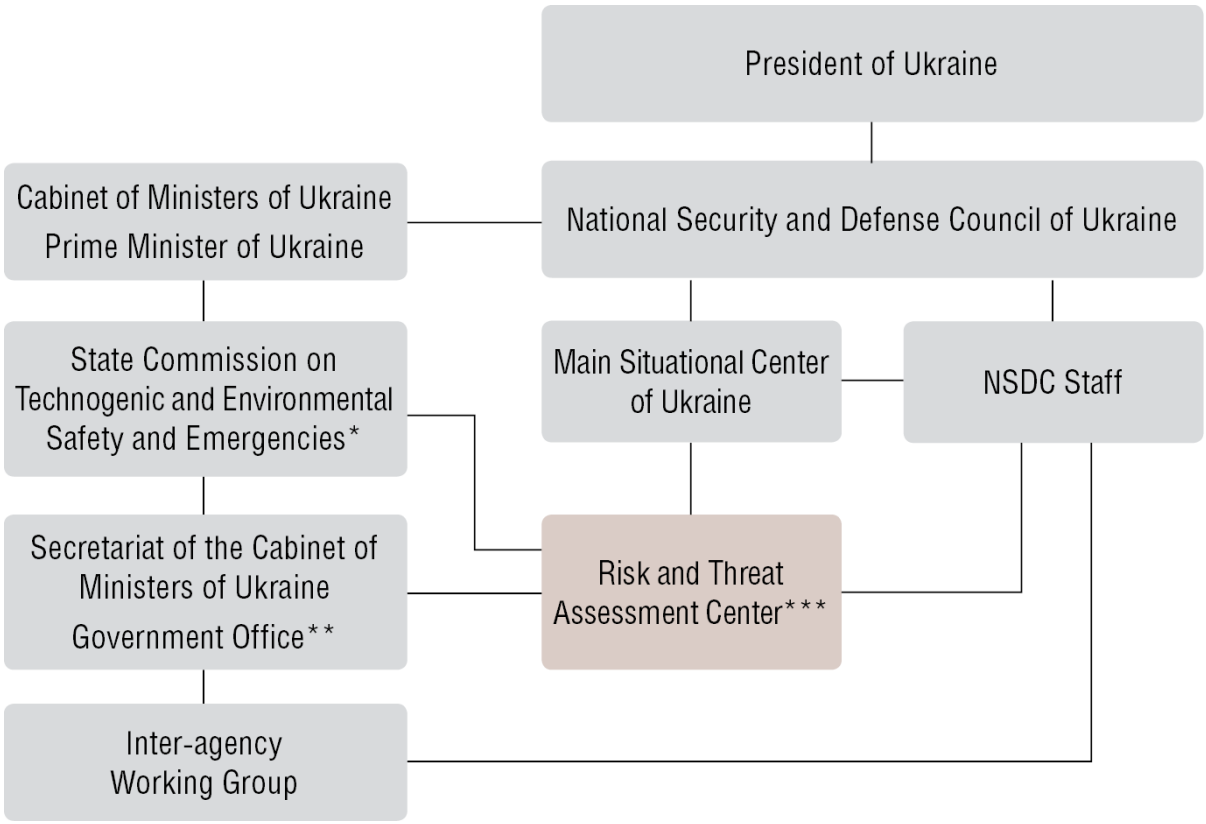
4. To support the Ukrainian government's national resilience ensuring efforts and operation of the aforementioned State Commission (the governmental coordination body), it is appropriate to establish a Government Office under the Secretariat of the Cabinet of Ministers of Ukraine with the following responsibilities vested therein:

- organization of drafting of regulatory acts, manuals, and recommendations regarding national resilience ensuring issues (both, general and specific) for various target groups (ministries and agencies, communities, population, and businesses);
- development of a public-private partnership in the national resilience ensuring area;
- organization of specific training sessions and exercises to promote the necessary knowledge and skills regarding threats and crises and response to them at different phases;
- creation of a resilient inter-agency communications, and networks of scientific institutions and representatives of the civil society on national resilience ensuring issues;
- control over the status of implementation of decisions taken in the relevant field.

5. The Inter-Agency Working Group that has already been established under the auspice of the Commission for Coordination of Euro-Atlantic Integration of Ukraine can be a supporting entity to coordinate activities of central executive authorities in the sphere of building national resilience.
6. The establishment of the Center under NSDC of Ukraine for organization of multi-level threat assessment, projecting emergencies and crises, and maintenance of the National Threat Register is required. The Center should interact with the Main Situational Center of Ukraine, accumulate information from authorized state bodies assessing threats within their competence, interested scientific and non-governmental institutions, apply advanced methods and technologies to threat assessment, and crises projection and more. This issue will be detailed below.

Schematically the mechanism of coordination of efforts in the sphere of national resilience in Ukraine at a strategic level is presented in *Fig. 5.1*. It should be noted, that in view of national specifics of constitutional powers distribution between the main branches of powers, this proposed mechanism is not ideal, but it can be implemented in the near future without a constitutional reform in Ukraine. If constructive cooperation is established between the NSDC of Ukraine and the Cabinet of Ministers of Ukraine, this mechanism can be rather effective.

The situation around countering the emergency caused by the COVID-19 in Ukraine affirmed the expediency to organize coordination of national resilience building in Ukraine in the proposed way, including the leading role of the Cabinet of Ministers of Ukraine and the State Commission on Technogenicand Environmental Safety and Emergencies in the sphere of crisis management and providing a whole-of-government approach to cooperation.



Notes:

** – functions and powers of the State Commission should be extended, and it may be transformed into a government body for the national resilience ensuring coordination;*

*** – Government Office, the responsibilities of which will include strategic planning, crisis management, and national resilience ensuring issues;*

**** – a body that is expedient to establish.*

Fig. 5.1. **Coordination mechanism in the field of national resilience in Ukraine at strategic level**

Source: developed by the author.

In addition to coordination bodies at a strategic level, the national resilience ensuring organizational mechanism should include a permanently functioning system of national and regional level resilience coordination bodies and inter-agency cooperation formats (structures) at regional and local levels operating on a permanent basis, the network of analytical, expert, scientific, educational institutions and centers for resilience development, as well as effective cooperation of all national resilience ensuring actors.

Considering the above, it is advisable to list all key elements of the national resilience ensuring organizational mechanism to include the following:

1) *national level*:

- National coordinator for the national resilience ensuring issues as a part of the National Security and Defense Council;
- Government Office for national security and the resilience ensuring issues at the Secretariat of the Cabinet of Ministers of Ukraine;
- Government coordination body for national resilience ensuring issues;
- permanent structures for inter-agency cooperation in the field of national security and resilience (inter-agency working groups, commissions, etc.);
- state authorities within their competence;
- supplementary and advisory entities for national resilience ensuring issues;
- national network of analytical, expert, scientific, educational institutions and centers for resilience development;

2) *regional and local levels*:

- local state administrations;
- permanent inter-agency cooperation structures for ensuring security and resilience of regions and local communities;
- territorial subdivisions of state authorities, local authorities, enterprises, institutions, organizations, civil society entities, and citizens initiating or engaging in the national resilience ensuring processes;
- supplementary and advisory entities for regional resilience ensuring issues and resilience of local communities;
- regional network of analytical, expert, scientific, educational institutions, and centers for resilience development.

Schematically the national resilience ensuring organizational mechanism is shown in *Fig.* 5.2.

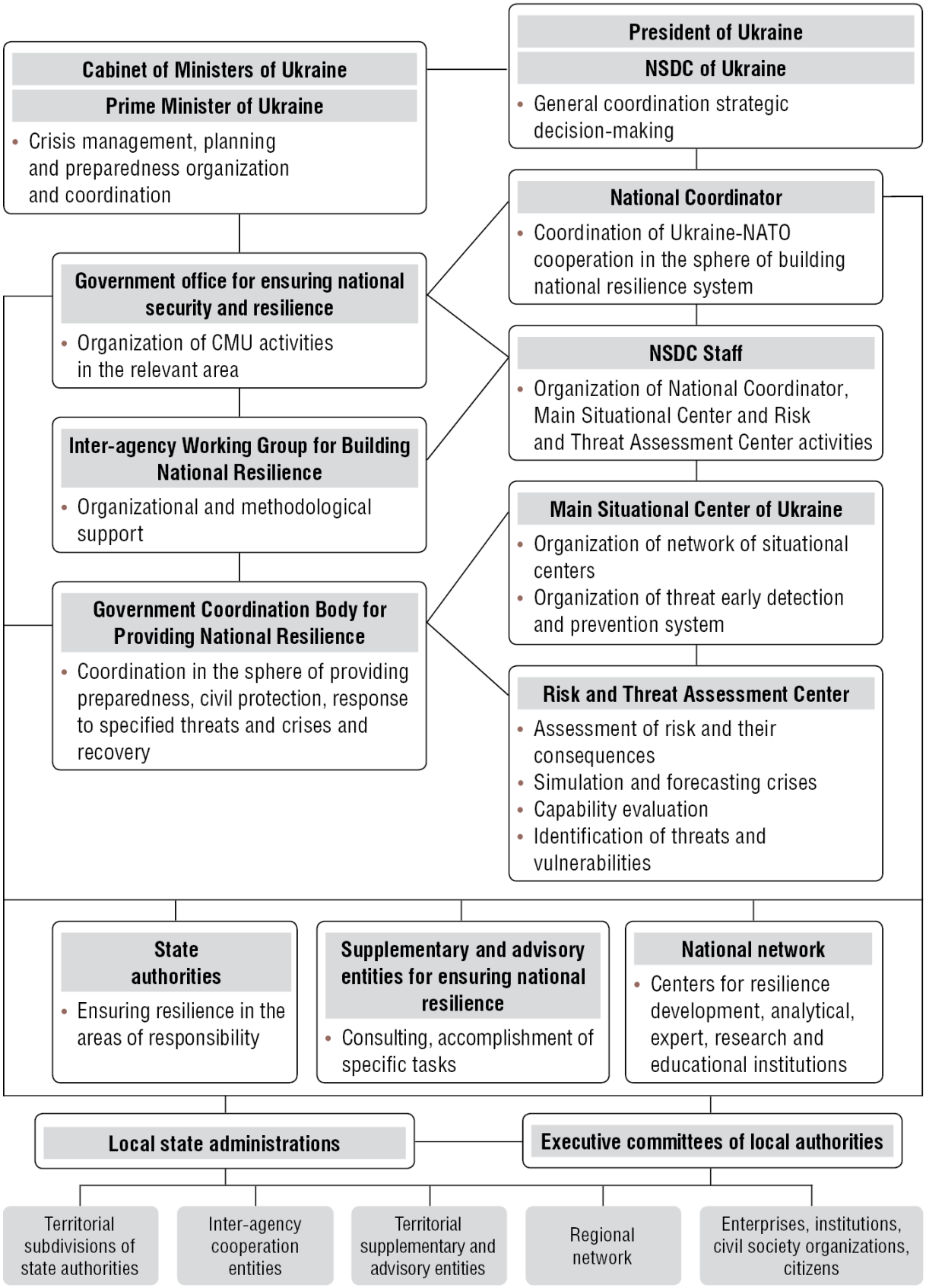


Fig. 5.2. **National resilience ensuring organizational mechanism**
Source: developed by the author.

In the course of establishing the national resilience ensuring system the crisis response and post-crisis recovery procedures need to be harmonized, and effective cooperation and synergy of security and defense forces and existing or emerging national level systems in the sphere of national security (such as Unified State Civil Protection System, Emergency medical services system, Law enforcement system of Ukraine, National counter-terrorism system, National cybersecurity system of Ukraine, State system for critical infrastructure security) should be in place. In case of emergency occurrence, response thereto and relief efforts should take into account the requirements of the Code of Civil Protection of Ukraine, and threats should be addressed following the procedure set out in certain laws of Ukraine.

The correlation between the national resilience ensuring system and the national security ensuring system of Ukraine means that the key areas of responsibilities of ministries and agencies should remain unchanged, but their responsibilities in the national resilience should be determined, their cooperation procedure refined, and the local self-government's powers should be extended. It is not expedient to create new central government authorities. The issues of effective coordination and activities in the sphere of ensuring national resilience are recommended to be addressed by specifying the powers or through reform of existing entities without expanding the government apparatus.

This proposed way of the national resilience ensuring system organization in Ukraine envisages the cross-cutting implementation of national resilience principles across all spheres of national security, different areas of public policy, and public administration in general.

5.3 Specifics of Formation and Implementation of State Policy in National Resilience in Ukraine

1.3.1. Priorities of State Policy in National Security and Resilience

Public policy in the sphere of national security and resilience envisages the definition of key goals and objectives, as well as expected results and their evaluation criteria. According to the proposed above conceptual framework of building national resilience, the key objectives in this sphere in Ukraine should be formulated around the following ***general goals***:

- introduction of a new paradigm of thinking due to which ensuring national resilience is the responsibility of each citizen, not the government alone;
- development of an adaptive management model that requires flexible and multi-optional state policy in national security, availability of alternative goals and plans, regular public policy update based on changing security situations and development trends, introduction of purposeful self-government mechanisms;
- providing effective cooperation that requires implementation in practice of whole-of-government interaction and mutual support principles, establishment of partnerships between the state, businesses, and population, designation of areas of joint responsibility, coordination of state and regional policies, redistribution of responsibility to empower local authorities and territorial communities, facilitation of national, regional, and local leadership;
- ensuring social cohesion by uniting people around the issues of ensuring security and resilience within the state, region, and local community;
- development of security and other capabilities to provide an appropriate level of preparedness and effective response to the wide spectrum threats and crisis situations;

- improvement of planning through harmonization of security strategies and programs with relevant documents on social and economic development, formulate coherent action plans concerning prevention and response to threats and post-crisis recovery;
- building security culture in society – introduce the rules of behavior and skills relating to avoiding threats and hazards or minimizing their consequences for the state and society;
- ensuring effective civil control of state resources expenditures in the field of national security and resilience.

Considering the above goals, problems to be addressed in the sphere of national security and resilience in Ukraine, world experience, and regularities as specified in the national resilience concept, it is expedient to formulate the following ***key objectives*** in the sphere of building the national security and resilience ensuring system in Ukraine:

- improve Ukrainian legislation concerning ensuring national resilience, including designation of powers and responsibilities of various national resilience ensuring actors;
- establish national resilience ensuring multi-level organizational mechanism;
- set effective coordination and cooperation among state and local authorities, territorial communities, enterprises, organizations and civil society institutions with regard to national resilience ensuring issues;
- shape the system of national level and regional coordination bodies to address resilience ensuring issues, organizational formats of inter-agency cooperation to operate on a permanent basis, and the network of scientific, expert, educational institutions, and resilience development centers;
- establish a mechanism, including channels and formats, to share information among national security actors;

- improve the strategic analysis and planning system in the sphere of national security of Ukraine, including through the full-cycle strategic planning implementation;
- introduce various risk management practices at national level in Ukraine based on international standards (ISO, 2018a, 2019a), including mandatory risk assessment and capability evaluation procedures;
- create a comprehensive national risk assessment system that will also include crises projection and simulation, identification of threats and vulnerabilities, evaluation of capabilities, visualization and promotion of obtained results, monitoring and review of assessment, models and other results, etc.;
- develop and introduce criteria and indicators to evaluate resilience and preparedness of the state, society, and local communities, including resilience in specific areas, organizational resilience of state, local authorities, and strategic-level enterprises and organizations;
- improve crisis management procedures, including introduction of universal protocols of concerted actions in terms of prevention and response to threats and crises at different phases of their deployment, taking into account inter-sectoral interdependencies and potential cascading effects;
- develop and implement special national resilience ensuring mechanisms in certain areas;
- develop and implement special advanced training sessions and courses for civil servants, personnel of national security and defense sector with regard to ensuring national resilience;
- promote necessary knowledge among the population and develop skills regarding response to threats;
- stimulate public-private partnership in the sphere of national security and resilience;

- develop international cooperation in the sphere of providing resilience with the consideration of processes in the global and regional security environment.

Considering numerous complex tasks in the sphere of national resilience in Ukraine, the overarching national framework for the functioning of the national resilience ensuring system should be created at the initial stage (up to two years). During the next phase (up to five years) the relevant practices should be promoted to regional and local level through a pilot project in one region and several local communities.

In the long-term perspective (over five years), the required elements and sub-systems of the national resilience ensuring system should be developed and effectively function on a permanent basis. According to adaptive management principles, the goals and objectives in the sphere of national security and resilience should be reviewed and updated regularly, including with regard to the results of strategic analysis and comprehensive risk assessment.

The planning of measures related to building the national resilience ensuring system should envisage definition of expected outcomes and their evaluation criteria. Therewith, the outcomes, on one hand, can characterize the progress in implementation of the measures related to organizational and legal support of this system, and include adoption of relevant regulatory acts or the establishment of certain entities and formats. On the other hand, the measures that have been taken should demonstrate a positive dynamic of indicators characterizing the national resilience criteria. To that end, appropriate indicators should be developed for each specific national resilience ensuring area, taking into account general recommendations concerning resilience criteria formulation. At that, optimal levels of such indicators should be established as benchmarks according to the specific context of a situation. Periodically, benchmarks should be adjusted in line with the trends in the security environment and changes in the security situation and the key parameters of the

national resilience ensuring system. The dynamic of actual indicators should be determined in the course of annual resilience self-assessment, as an important element of the comprehensive national risk and threat assessment system, which will be detailed below.

5.3.2. Improvement of Planning in the Sphere of National Security Taking into Account National Resilience Ensuring Goals and Objectives

The gaps in the strategic planning process in Ukraine were revealed in the course of major preparation of national security related documents in 2021, as required by the National Strategy of Ukraine 2020 (President of Ukraine, 2020b). Building national resilience ensuring system outlines new requirements to this process, which imply amendments in the Law of Ukraine (2018), to improve planning in the sphere of national security. It should be noted, that both the planning methodology and organization of appropriate processes in Ukraine need to be refined. The overall inconsistency of strategic documents and policy development processes in the state, including in the sphere of national security, economic and social development, and sustainable development actualizes the issue of development and adoption of the law on national strategic planning in Ukraine.

The main *principles* of planning in the sphere of national security and resilience should be as follows:

- lawfulness;
- objectivity;
- flexibility;
- cooperation;
- integrity;
- distribution of risks and responsibilities;

- reasonable transparency;
- coordination;
- control.

It should be noted, that planning is to become a part of adaptive management. Therefore, plans should be revised periodically and refined in line with up-to-date information. In particular, strategic planning processes, like other types of planning in the sphere of national security, should be aligned with risk and threat assessment.

Current Ukrainian legislation does not provide full-cycle planning in the sphere of national security, which should encompass periodic analysis and assessment of risks, security capabilities, identification of threats and vulnerabilities, planning of measures concerning providing security and resilience of the state, specific fields and branches, regions, communities, and society, development of strategic and policy documents of the state, and their periodic adjustment. Also, there are no uniform rules regarding the preparation of planning documents for different phases of the national resilience ensuring cycle (primarily ensuring preparedness, response, relief efforts, post-crisis recovery) and inter-agency cooperation to generate joint capabilities, designate the sequence of use of different resources (both governmental and non-governmental), forces and means, including international assistance.

According to the theoretical background, as described in Chapters 1 and 2 of this monograph, world best practices, and also, the specifics of Ukrainian legislation, it is advisable to introduce the strategic planning cycle in Ukraine, encompassing processes with different periodicities assembled on the basis of a common goal. In particular, according to the Law of Ukraine (2018) (Part 1, Article 26), the National Security Strategy is a long-term planning document. The same applies to planning documents in the areas of national security, as specified in this Law. However, the assessment of risks and capabilities (via self-assessment) and testing of approved plans during exercises and training sessions

should take place annually to timely adjust the national resilience ensuring benchmarks and priorities, specific and sectoral resilience plans, and emergency and crises related plans. The National Security Strategy's adjustment should be preceded by preparation of a comprehensive report on the results of assessment of risks and capabilities and identification of threats and vulnerabilities in the field of national security of Ukraine.

The above mentioned strategic planning cycle in the field of national security is presented in *Fig.* 5.3. It shows a shorter cycle going from comprehensive risk assessment to adjustment of plans inside a longer national security strategy development and updating cycle.

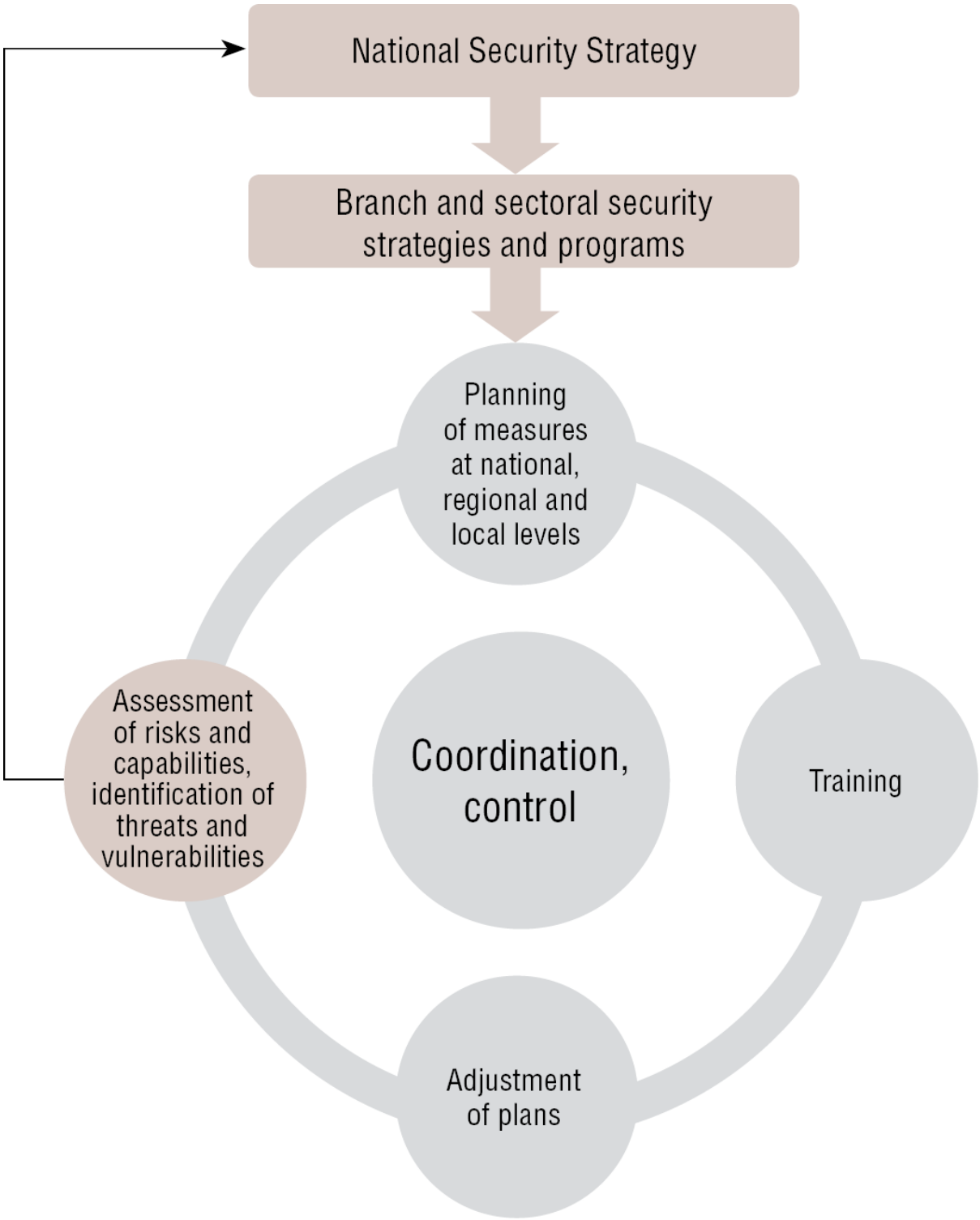


Fig. 5.3. **The strategic planning cycle in the field of national security**
Source: developed by the author.

To establish a holistic approach to strategic planning in the state, it is advised to develop and adopt the *law of Ukraine on public strategic planning* to designate the following:

- the types of planning documents in the state:
  - strategic (the National Security Strategy and long-term planning documents in the areas of national security, the Economic, and Social Development Strategy);
  - operational (including plans of response to certain threats and emergencies and universal protocols of concerted actions in the case of crises);
  - tactical (including plans to respond to a current emergency, relief, and recovery plans);
- regulations and schedules for their development, approval, revision, and alignment with the budgeting process;
- spheres of planning;
- regulations concerning the alignment and integration of plans of different levels in different areas;
- requirements to general structure and content of documents;
- requirements for sources and quality of reporting information for planning;
- regulations for cooperation between central and local authorities and the engagement of civil society and businesses in planning processes;
- regulations for control of planning processes and implementation of planning documents.

In addition to strategic planning, planning of response to certain threats, emergencies, and crises is crucial for providing national resilience. A special focus should be on the issues relating to universal protocols of concerted actions for responding to crises. As mentioned in the above chapters of this monograph, different risks may produce similar effects (such as jeopardy to life and health of people, damage to infrastructure, residential buildings, and property). Countering these kinds of threats and relief efforts may follow the same

response algorithm. In this regard, for planning purposes, it is advised to identify the key groups of generic threats and universal response efforts (*Table 5.1*).

Table 5.1

Form to identify the key groups of generic threats and universal response efforts

Groups of generic threats	**Groups of generic response efforts**	**Capabilities**	**Requirements**
1. Unavoidable threats: - - -	• Adaptation: - - • Ensuring preparedness: -	•	•
2. Threats, the effects of which can be mitigated: - - -	• Prevention: - - • Prophylaxis - - • Ensuring preparedness: -	•	•
3. Threats requiring active countering: - - -	• Ensuring preparedness: - - • Response - - • Recovery: -	•	•

Source: developed by the author.

National security and resilience ensuring measures can include regulatory, organizational, technical, financial, economic, social, educational, and international ones.

The Law of Ukraine “On National Security of Ukraine” needs to be amended to include an integrated cycle of strategic planning in the field of

national security of Ukraine and a requirement to formulate national resilience ensuring goals and objectives in the planning documents at different phases.

It is expedient to launch methodological training in Ukraine at the initial stage of strategic planning documents development in the areas of national security of Ukraine. The leading scientific institutions, including the National Institute for Strategic Studies, should be involved in organization and facilitation of such events. It is important for all actors involved in the development and implementation of planning documents to understand clearly what is required from them and be prepared to implement measures that are set forth in approved documents.

The development of action plans to implement the subject documents with clearly formulated objectives, benchmarks, responsible entities, and guides is an integral part of Ukraine's National Security Strategy implementation process. The outcomes of sectoral security strategies should be evaluated against established criteria and indicators. The state authorities, responsible for the implementation of sectoral strategies, should publish annual progress reports, similarly to what is required for the Strategy of Public Security and Civil Protection of Ukraine in accordance with Part 5, Article 29, the Law of Ukraine "On National Security of Ukraine" (Law of Ukraine, 2018).

Considering the negative experience of implementing the previous versions of the National Security Strategy of Ukraine, the subject Law of Ukraine needs to be amended to include a control and progress reporting procedure for implementation of the Strategy and other planning documents in national security areas.

The clauses of the Law of Ukraine "On National Security of Ukraine" (Law of Ukraine, 2018) regarding a comprehensive review of the security and defense sector of Ukraine and its components also need improvement to incorporate evaluation of capabilities and level of preparedness for threat, emergency, and crisis response, as well as regular self-assessment practices,

should be applied across state and local authorities in terms of ensuring resilience to certain threats, emergencies, and crises. The above novelties will foster improved planning effectiveness, correspondence of efforts to existing or anticipated threats and risks, and timely adjustment of plans to accommodate the emerging vulnerabilities.

Also, it would be advisable to incorporate planning norms in the sphere of ensuring preparedness and response to crises into the Law of Ukraine "On National Security of Ukraine" (Law of Ukraine, 2018), to include definition of "crisis" and the main types of crises, that will be subject to planning and implementation of measures to develop preparedness and response, as well as the legal framework for planning in appropriate areas.

The development of action plans in the sphere of civil protection, prevention, and response to certain threats and crises should take into account the goals and objectives referring to the strengthening of national resilience. Such measures are required, in particular, to support:

- regular exercises and training sessions involving communities and the population;
- establishment of strategic communications;
- resilient communications with communities and population;
- engagement of communities, public associations, businesses and other stakeholders in the planning of measures in the sphere of civil protection, prevention, and response to certain threats and crises.

The development of international cooperation is an important area in terms of improving planning in national security and resilience. Thus, within the framework of Ukraine – NATO cooperation, it is expedient to focus, inter alia, on acquiring by the central and local government representatives of appropriate knowledge and skills in the field of planning a response to crises and reviews on

preparedness issues, including by joint exercises and training sessions with NATO representatives.

5.4 Multi-Level Comprehensive National Risk Assessment System Creation Perspectives

1.4.1. Prospective Model for Organization of Comprehensive Multi-Level Risks and Threats to National Security Assessment System of Ukraine

General risk assessment and risk management recommendations are provided in ISO standards. In Ukraine, adapted versions of some of these standards, such as DSTU IEC/ISO 31010:2013 are in effect. However, it should be borne in mind that they provide general recommendations and do not exclude further development and refinement of their clauses for different branches.

The establishment of a multi-level comprehensive national risk and threat assessment system in Ukraine should focus on improvement of strategic planning and analysis, enhancement of preparedness of the state and society to respond to the broad spectrum of threats, and national resilience strengthening in general. The establishment of such a system requires legal regulation of fundamental principles of its operation, its inherent processes, approval of uniform procedure and methodology to assess risks and threats to national security and relevant capabilities, designation of organizational model and principles of cooperation between state authorities, scientific institutions, and other actors involved in such activities.

An important objective of the national risk and threat assessment system is to specify generic groups of risks and their consequences for the key target groups, and based on such analysis, develop universal protocols of concerted response to threats and crises at different phases of their deployment. Scenario-based projections and simulation of crises will support timely prioritization and

updating of actions plan for specified periods. The uniform methodology of assessment of risks and threats to national security is critically important, as it will enable comparison and prioritization of threats and their consequences in different areas based on uniform principles and criteria.

The subject comprehensive assessment system should extend beyond the mere assessment of risks and threats to national security, and should encompass also evaluation of capabilities that are required to effectively respond to threats at different phases. In view of the features of the administrative and territorial organization of our state, the comprehensive risk and threat assessment system should be multi-level, i.e., function both at national and regional levels. However, it is expedient to introduce different levels of this system in phases in Ukraine.

The *main processes* to be implemented in Ukraine to establish the comprehensive risk and threat assessment system are as follows:

- annual risk and threat assessments, emergency and crisis projection and simulation;
- generation and maintaining national and regional threat registers;
- annual resilience self-assessment to be carried out by state and local authorities, strategic enterprises and organizations;
- analysis of correspondence of existing capabilities to identified threats and scenario-based projections of their occurrence and development of crises, and also identification of vulnerabilities and needs to enhance capabilities. This work should take be done every five years based on the results of the comprehensive and sectoral reviews of the national security and defense sector in Ukraine.

The results of comprehensive assessment of risks and capabilities, identification of threats and vulnerabilities should be taken into account in shaping public policy in national security and resilience, including drafting of a

new version of the National Security Strategy of Ukraine or refinement of its clauses.

Recognizing the significance of the above conceptual framework of building national security ensuring system and world best practices, it is expedient to propose the *model of a multi-level comprehensive system of assessment of risks and threats to the national security of Ukraine,* as presented in Fig. 5.4 (Reznikova et al., 2021).

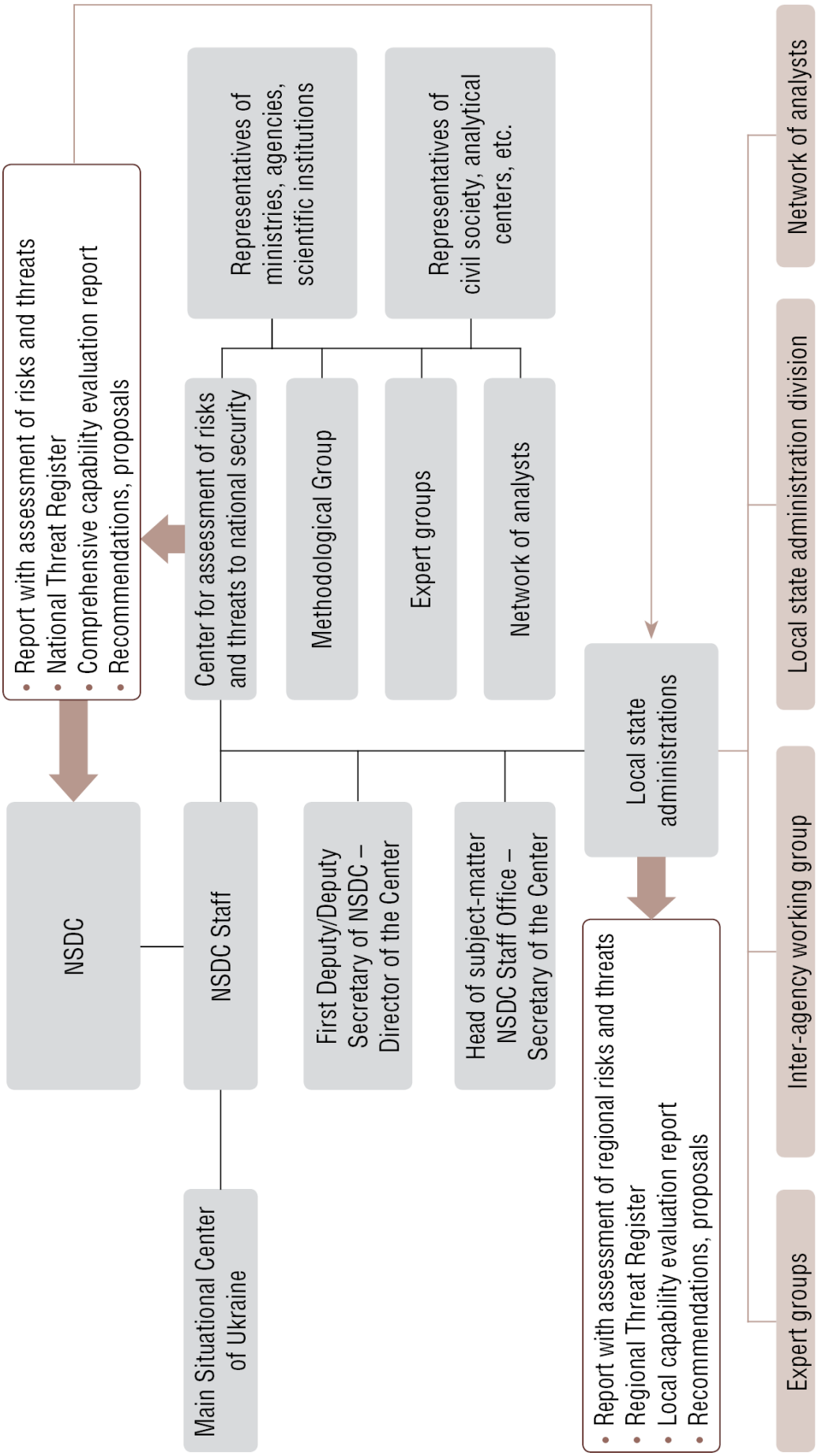

Representatives of ministries, agencies, scientific institutions
Representatives of civil society, analytical centers, etc.
Network of analysts
• Report with assessment of risks and threats
• National Threat Register
• Comprehensive capability evaluation report
• Recommendations, proposals
Center for assessment of risks and threats to national security
Methodological Group
Expert groups
Network of analysts
Local state administration division
Local state administrations
NSDC
NSDC Staff
First Deputy/Deputy Secretary of NSDC – Director of the Center
Head of subject-matter NSDC Staff Office – Secretary of the Center
Inter-agency working group
Main Situational Center of Ukraine
• Report with assessment of regional risks and threats
• Regional Threat Register
• Local capability evaluation report
• Recommendations, proposals
Expert groups

Fig. 5.4. **The model of multi-level comprehensive system of assessment of risks and threats to the national security of Ukraine**

Source: developed by the author.

The organization of operation of the proposed multi-level comprehensive system of assessment of risks and threats to the national security of Ukraine (*Fig. 5.4*), coordination of efforts of its actors and maintenance of the National Threat Register should be vested in the *Center for assessment of risks and threats to the national security of Ukraine* (hereinafter – the Center), which is expedient to establish as a supplementary working entity of the National Security and Defense Council of Ukraine. Establishment of such centers is quite common practice in the world.

According to Article 14, the Law of Ukraine "On the National Defense and Security Council of Ukraine" (Law of Ukraine, 1998), the inter-agency commissions, working and advisory entities may be established based on the NSDC's decision and funding from the State Budget of Ukraine to elaborate on and complex address issues of inter-sectoral character and provide scientific, analytical and forecasting support to the National Security and Defense Council of Ukraine. The functions and responsibilities of these entities have to be set out in specific regulations that are subject to approval by the President of Ukraine.

According to the subject Law of Ukraine, the key *functions* of the Center, inter alia, should be defined as follows:

- coordination and control of executive authorities and other actors involved in the processes related to the assessment of risks and threats to the national security of Ukraine;
- control of the receipt and processing of necessary information, its storage, confidentiality, and use in the interests of the national security of Ukraine;

• analysis of security environment status and tendencies in its development in Ukraine and across the world;

• projecting crises and threats to the national interests of Ukraine.

The key *areas* of the Center's activities should be as follows:

- organizational and methodological support of assessment of risks and threats to national security, including those of inter-sectoral character;
- ensuring scientific, analytical, and forecasting support of NSDC of Ukraine regarding strategic planning issues in the areas of national security and defense, including within the framework of the cycle of National Security Strategy of Ukraine development and implementation;
- drafting proposals to the President of Ukraine regarding implementation of domestic and foreign policy in the field of national security and resilience, including the definition of strategic national interests of Ukraine; conceptual approaches to national security and resilience and their directions; improvement of national security ensuring system and building defense capacity in the context of addressing objectives relating to the strengthening of national resilience; material, financial, personnel, organizational and other support to eliminate vulnerabilities and develop capabilities in the field national security and resilience;
- implementation of political, social, military, scientific, technical, ecological, information-wise, and other measures in line with the scale of potential and actual threats to the national interests of Ukraine;
- drafting appropriate strategic and program documents, etc.

Considering the principal goals and roles of the Center, its key *task* should include the following:

• strategic analysis of security environment, identification, assessment, and ranking of current and anticipated risks and threats to the national security of Ukraine, identification and assessment of their impacts on different target groups, development of scenarios of risks and threats occurrence and

development of crises, identification of generic groups of current and projected risks and threats;

- identification of long-term trends in global and regional security environment and their impact on national security and sustainable development of Ukraine;
- collection and processing of information to assess risks and threats to the national security of Ukraine in support of decision-making processes in the field of national security;
- ensuring coordination of efforts of security and defense sector bodies and other authorities in the sphere of risk and threat assessment;
- methodological support of local authorities concerning the assessment of threats and capabilities;
- preparing annual reports on assessment of current and anticipated risks and threats to the national security of Ukraine, and self-assessment of strategic government institutions, organizations, and enterprises; a complex report concerning the results of assessment of current and anticipated risks and threats to the national security of Ukraine and the status of appropriate capabilities, proposals regarding drafting a new version of the National Security Strategy of Ukraine or refinement of its specific clauses;
- periodic revision of assessments of current and projected risks and threats to the national security of Ukraine and the status of appropriate capabilities;
- visualization of the results of risks and capabilities assessment, identification of threats and vulnerabilities, preparing the threat data sheets (threat passports);
- publication of results of analysis of threats to the national security of Ukraine pertaining to non-classified information, including the National Threat Register;

• study and adoption of world best practices in the areas of risk assessment, identification and ranking of current and anticipated threats to national security, identification and assessment of their consequences, and the development of scenarios of risks and threats occurrence and deployment of crises;

• providing international cooperation regarding the use of advanced methods and technologies in strategic analysis of security environment, risk and threat assessment, projection and simulation of crises.

Based on the results of assessment, *proposals* should be developed concerning:

- priorities in the national interests of Ukraine and in ensuring national security and resilience;
- goals, key areas, and objectives of public policy in national security and resilience;
- areas and objectives of the reform and development of security and defense sector and enhancement of capabilities required to strengthen national resilience;
- resources required to implement the National Security Strategy of Ukraine;
- improvement of conceptual approaches to and directions of ensuring national security of Ukraine, as well as planning in the areas of national security and defense of Ukraine;
- improvement of legislation, including strategies, concepts, government programs, and other strategic documents, which designate the key areas and objectives of public policy in the areas of national security and resilience;
- universal protocols of concerted actions to respond to threats, emergencies, and crises at different phases.

Such proposals should be duly referred to the President of Ukraine and the National Security and Defense Council of Ukraine.

The Center should also be assigned the task of formulation, maintenance, and periodic update of the *National Threat Register* (hereinafter – Register), as a publicly accessible version of the results of assessment of risks and threats to the national security of Ukraine.

The Register should include the following elements:

- overview of security environment of Ukraine;
- description of current and anticipated threats to the national security of Ukraine, the main types of crises to include emergencies that may occur within the next five years and their potential consequences for the people;
- description of legislative mechanisms and procedures for threat, crisis and emergency response, the list of responsible state authorities and their contact information, and crisis management recommendations to population;
- the main provisions of the methodology of risk assessment and threat ranking.

To complete the assigned tasks, the Center should be duly *entitled* to:

• establish a network of analysts in the area of strategic analysis of security environment and assessment of risks and threats by involving representatives of central and local authorities, research institutions, enterprises, non-governmental organizations, and independent experts;

• request from state and local authorities, enterprises, institutions, and organizations and obtain, at no cost, self-assessment reports, statistics, reference, information and other data to address the issues that are within the competence of the Center;

• utilize capabilities of the network of situational centers, including the Main Situational Center of Ukraine;

- use information databases of state authorities, government communication systems, special communication networks, and other technical means;
- organize scientific, research, developmental, and other work in the sphere of strategic security environment analysis;
- initiate conferences, seminars, and meetings on the issues that are within the competence of the Center, with the involvement of representatives of state authorities, national and international organizations, institutions, and experts;
- cooperate, according to the assigned tasks, with state and local authorities, enterprises, institutions, and organizations;
- organize seminars and trainings for representatives of local authorities with regard to the assessment of regional risks and capabilities and the identification of threats and vulnerabilities at local level;
- duly designate the access regime to assessment results.

In view of the complex nature of present-day threats, the Center should apply both traditional and advanced methods and technologies of risk and threat assessment and projection and simulation of emergencies and crises.

In its activities, the Center should be governed by the Constitution and laws of Ukraine, acts of the President of Ukraine, Regulation on the Center, and other regulatory acts of Ukraine. In the *organizational context*, it is expedient to establish the Center based on the principle of departmental representation. The appointment of deputy leaders of ministries, agencies, and scientific institutions as members of the Center will ensure high level representation, as well as reliable inter-agency liaison in the sphere of risk and threat assessment.

The function of risk and threat assessment and identification of threats in different areas would be expedient to assign to the ministries, agencies, and organizations that will engage in the Center's activities either directly via their

representatives, who are members of the Center, or on a separate order. At that, the subject ministries, agencies, and organizations can apply specific risk and threat assessment methods within the areas of their responsibility. The uniformity of risk assessment methodology includes harmonization of risk assessment principles and general approaches in different spheres to be able to compare the results. Also, the subject entities should prepare data for comprehensive risk assessment reports in the prescribed form and provide information necessary for the National Threat Register generation and maintenance.

Identification of the *spheres of national security* requiring risk assessment and threat identification, and distribution of responsibilities between the Center and involved ministries and agencies with regard to risk assessment and threat identification, as well as generation of necessary reports and papers, are pivotal provisions of risk assessment and threat identification methodology to be developed by the Center.

Considering the Center's mission and functions in the sphere of elaborating on and comprehensively solving problems of inter-agency nature, scientific, analytical, and forecasting support to the National Security and Defense Council of Ukraine, the establishment and operation of the Center under the National Security and Defense Council of Ukraine (NSDC) would be the most effective solution, which can be implemented at the current moment as follows:

1) establish the Center as NSDC's supplementary working entity; or
2) the Main Situational Center of Ukraine to perform the function of the Center while undergoing comprehensive reform and transformation into NSDC's working entity.

It is expedient to provide the Staff of the NSDC with information analysis, experts, organization, logistics, and other types of support for the Center. In the future, it is advisable to establish a separate organizational structure within the

NSDC, which will combine the Center for National Security Risks and Threats Assessment, the Main Situational Center of Ukraine, the Center for the Critical Infrastructure Resilience, and other similar organizations that were established within the NSDC and focus on enhancing the national resilience. Such an organization shall involve leading experts in the fields of strategic analysis and threat assessment. This approach will allow combining technical and analytical components within a strategic analysis and planning system.

In case the Main Situational Center of Ukraine will be charged with fulfilling the functions of the Center for National Security Risks and Threats Assessment, it should be transformed into a working body of the NSDC. Its technical capabilities need supplementing with an analytical component that will identify the main tasks to work upon within the existing hardware and software package as well as its further development areas.

The proposed Center for National Security Risks and Threats Assessment needs to have a structure, which includes its head, secretary, and other members of the Center, as well as a Methodology group.

It is expedient to determine the members of the Center by positions at the level of authorized deputy heads of executive bodies, state institutions, and scientific organizations. This refers in particular to the Ministry of Defence, Ministry of Internal Affairs, Security Service of Ukraine, Foreign Intelligence Service, Defence Intelligence of the Ministry of Defence, State Service of Special Communication and Information Protection of Ukraine, State Migration Service, State Financial Monitoring Service, Ministry of Economy, Ministry of Agrarian Policy and Food, Ministry for Strategic Industries, Ministry of Environmental Protection and Natural Resources, Ministry of Energy, Ministry of Infrastructure, Ministry of Health, Ministry for Communities and Territories Development, Ministry of Finance, National Bank of Ukraine, as well as the National Institute for Strategic Studies, the Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine, the National

Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute." This list may include other governmental agencies and scientific organizations as well.

Since authorized state bodies will be entrusted with assessing risks and threats, it is logical to assume that members of the Center as senior executives within these bodies, on the one hand, shall provide for a representation of respective bodies within the Center, and on the other hand – control of fulfillment of assigned tasks related to assessing risks, threats, and producing respective results.

In addition, to perform assigned tasks, the Center shall have the right to shape the network of analysts in the fields of security environment strategic analysis and risks and threats assessment, targeted working group and expert level teams, as well as arrange for meetings and other communication events.

It is expedient to appoint as the *head of the Center* the First Deputy (or Deputy) Secretary of the National Security and Defense Council of Ukraine, who is responsible for ensuring national resilience. Due to the Regulation on the Commission for the Coordination of Euro-Atlantic Integration of Ukraine, as approved by the President of Ukraine (2019d), the Vice Secretary or one of the deputies of the Secretary of the NSDC of Ukraine, whose scope of duties includes the issues of developing the national resilience system, is considered to be the National Coordinator for the Ukraine-NATO cooperation in the area of building the national resilience. Thus, it is expedient to combine the functions of a national coordinator and the head of the Center.

The following responsibilities may be assigned to the head of the Center:

- managing the Center's operations, identifying its operating procedures, convening and chairing meetings of the Center;
- approving the following:
  - composition of working and expert teams as they get established;

- methodology for conducting an assessment of risks to the national security of Ukraine and their consequences, ranking and defining priority of threats, and developing projected scenario of the threats and crises development;
- methodology for evaluating capabilities in the areas of preventing threats and crises, providing for readiness and response to them, minimizing and eliminating their consequences based on the outcomes of a comprehensive review of the security and defense sector and sectoral reviews;
- a draft annual report on the results of the assessment of current and projected risks and threats to the national security of Ukraine;
- a draft comprehensive report on the results of the assessment of current and projected risks and threats to the national security of Ukraine as well as the status of corresponding capabilities following the discussion of the report at the Center's meeting;
- structure, format, and procedures for maintaining the National Threat Register;
- structure and form of the reports on assessment outcomes that are drafted by the Center.

In addition, the head of the Center shall:

- assign tasks to the members of the Center to draft annual and comprehensive reports on the results of assessing current and projected risks and threats to the national security of Ukraine, as well as the status of respective capabilities; monitor the tasks performance;
- make decisions on releasing the results of the national risks and threats assessment as related to non-classified information;
- represent the Center in its relations with state agencies, enterprises, and international and public organizations.

In accordance with the above proposals on the legal basis for the establishment of the Center, its head should be appointed and dismissed by the President of Ukraine.

It is expedient to assign as the *Secretary of the Center* the head of a structural division of the Staff of the National Security and Defense Council of Ukraine, which is responsible for the issues of strategic planning, analysis, and national resilience. The relevant structural division of the NSDC's Staff shall support the activities of the Center on the organizational level, but also possess a proper professional potential to carry out appropriate analytical work in the field of strategic analysis and, in particular, assess risks and threats.

It is advisable to assign broad responsibilities to the Secretary of the Center to include support of the following:

- accumulation, consolidation, and processing of information received from members of the Center, other ministries, departments, institutions, enterprises, and organizations required to assess current and projected risks and threats to the national security of Ukraine and the state of relevant capabilities, using the capabilities of the Main Situational Center of Ukraine as well as the preparation of annual and comprehensive reports;
- consolidation of proposals in order to draft protocols of concerted actions to respond to threats and crises, including emergencies, at different stages of their development;
- maintenance and periodic update of the National Threat Register.

Based on the established procedures the Secretary of the Center also shall: draft and submit to the head of the Center proposals for the Center's working plans; draft meeting agendas taking into account proposals from Center members; establish working and expert teams and composition of such teams; conduct communication events; coordinate the work of established working and expert groups; support the development and submission to the head of the Center as well as support discussion at the Center's meeting of draft annual reports on results of assessing current and projected risks and threats to the national security of Ukraine; create a comprehensive report on results of assessing current and projected risks and threats to the national security of Ukraine as well

as the status of respective capabilities; inform the head of the Center on the status of implementing the decisions made by the Center; submit proposals to the head of the Center on improving the Center's operations; and perform other tasks as assigned by the head of the Center.

The responsibilities of the *members of the Center* shall primarily cover the issues of supporting the following according to the established methodology for their field of responsibility:

- assessment of risks and threats to the national security of Ukraine and their consequences in terms of defined target groups;
- development of scenarios for the implementation of risks and threats and the development of responses to a crisis;
- identification of long-term trends in global and regional security environments, assessing their influence on national security and the sustainable development of Ukraine;
- evaluation of correspondence between existing capabilities and identified risks and threats as well as scenario forecasts for their implementation and development of crises, identification of vulnerabilities, and the need to enhance capabilities;
- drafting the proposals to shape protocols of concerted actions aimed at responding to threats and crises, including emergencies in various stages of their development;

  If necessary, the members of the Center can initiate the following:

  - receiving statistics, analysis, and other types of information from ministries, departments, institutions, organizations, and enterprises. This information is necessary to evaluate risks and threats to the national security of Ukraine and the status of its respective capabilities;
  - establishment of working and expert groups in the area of their activities;

- conducting communication events.

It is also advisable to commit the members of the Center to provide, following identified procedures and within specified timeframes (to include remotely) in compliance with legislative requirements in securing classified information:

- data and information necessary to shape and update the National Threat Register;
- results of assessing the risks and threats to the national security of Ukraine.

A fundamentally important issue in the work of the Center is the development of methods and approval of a single evaluation methodology. To this end, it is expedient to form *a Methodological Group* within the Center. Its responsibilities shall include:

- development of a unified comprehensive methodology of evaluating risks and threats to the national security of Ukraine as well as their consequences, ranking and identifying priorities of threats, drafting scenarios of manifestation of threats, and development of crises;
- development of a unified comprehensive methodology of evaluating capabilities in the areas of preventing threats and crises, providing for the readiness and response to them, minimizing and eliminating their consequences based on the outcomes of a comprehensive security and defense sector review as well as sectoral reviews;
- monitoring compliance with approved methods by all state and local authorities as well as institutions, organizations, and experts involved in assessment;
- examination of the draft annual report on the results of assessing current and projected risks and threats to Ukraine's national security and a comprehensive report on the results of assessing current and projected risks and threats to Ukraine's national security and the state of relevant

capabilities concerning their completeness, reliability, and compliance with a certain methodology;

- identification of the structure, format, and contents of the National Threat Register;
- identification of the structure and format of the assessment reports drafted by the Center;
- amending and supplementing approved methodologies, if necessary.

Taking into account peculiarities of operations as well as the high scientific and analytical potential of organizations, it is expedient to supplement the Methodology group with respective experts from the National Institute for Strategic Studies, the Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine, the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute," as well as other leading scientific organizations of Ukraine, if required.

According to established practice, members of the Methodology Group and organizations headed by them should not be directly involved in assessing risks and threats to the national security of Ukraine and the state of relevant capabilities. This approach is aimed to provide impartiality during the examination of the obtained results and the draft reports. The establishment and functioning of the Methodological Group with appropriate responsibility will ensure a necessary balance between the results of scientific research and the pragmatic goals of public administration.

It is expedient to determine the main form of work of the Center as meetings that are chaired by the head of the Center. These meetings shall be conducted when necessary but no less than once a quarter. It should be established that the meeting of the Center is valid if it is attended by more than half of its members. The decision of the Center should be taken at the meeting by a majority vote of its members. In the case of an equal distribution of votes, the vote of the chairman of the meeting should be decisive. If a member of the

Center does not agree with the decision, he/she should have the right to express a separate opinion in writing, and this opinion will be attached to the meeting minutes. The decisions made by the Center should be recorded in the protocol signed by the chairman of the meeting and the secretary of the Center.

It is expedient to determine the decisions of the Center as mandatory for consideration by state and local authorities, military formations established by the laws of Ukraine, enterprises, institutions, and organizations.

The procedure for the functioning of the Center, its responsibilities, involvement of scientific institutions, non-governmental organizations, independent domestic or foreign experts, the mode of access to the results of its work, and other issues should be determined by the *Regulation on the Center,* which should be approved by the President of Ukraine due to the Article 14 of the Law of Ukraine "On the National Defense and Security Council of Ukraine" (Law of Ukraine, 1998). To ensure the continuity of the Center's operations, it is necessary to determine its official composition in the Regulations, and the NSDC Secretary shall be assigned to approve its membership.

Since the process of building a national resilience ensuring system in Ukraine has not yet gained sufficient momentum, the introduction of a multi-level system for assessing threats in the field of national security should be carried out in several stages.

Short-term (priority) tasks (1-2 years) should include the development and adoption of legal acts on the establishment and functioning of a national system of risks and threats assessment, as well as the designation (or formation) of a body responsible for coordinating relevant activities.

Taking this into account, during *phase one* of establishing the mentioned above national system it is expedient to introduce the following processes:

- annual assessment of risks and threats to Ukraine's national security as an element of strategic planning and adaptive management.

- development of annual reports on the results of the assessment of risks and threats to the national security of Ukraine.
- assessment of capabilities to counter current and projected threats to national security and crises, including emergencies, based on the results of a comprehensive review of the security and defense sector of Ukraine and sectoral reviews.
- drafting periodic (every five years) comprehensive reports on the results of assessing current and projected risks and threats to Ukraine's national security and the state of relevant capabilities as the basis for the development of the draft National Security Strategy of Ukraine.

Also, at this stage, it is necessary to decide on the establishment (or performance of its functions) of the Center for national security risks and threats assessment in Ukraine, which will provide the functioning of a relevant system at the strategic level and to develop a methodology for assessing risks and threats to national security and the state of relevant capabilities.

Mid-term tasks (3-5 years) include expanding the national risk and threat assessment system to regional and local levels.

Accordingly, in *phase two* of the mentioned national system building it is expedient to:

- identify local authorities whose responsibilities will include coordination of actions in the field of assessing regional risks and threats, as well as creating and maintaining appropriate registries;
- establish regional formats (structures) of interagency cooperation in ensuring the security of regions. These structures will operate permanently, and their responsibilities will include, in particular, shaping regional threat registries;
- introduce a unified methodology for assessing risks and threats to national security and the state of relevant capabilities at all levels in the state;

- develop and implement training programs for identifying threats and vulnerabilities, assessing risks and capabilities;
- establish interaction and exchange of information between the actors of assessment of the national security risks and the state of relevant capabilities at the national, regional, and local levels;
- the Center for national security risks and threat assessment of Ukraine shall arrange and conduct training for regional representatives on methodology and processes of risk and threat assessment, as well as establish reliable communications with local administrations and established structures for interagency cooperation.

In *phase three* of the building national system for assessing risks and threats, it is necessary to introduce the following:

- drafting periodic regional reports on results of assessing risks and threats;
- regional threat registries.

It is expedient to approve the decision of the National Defense and Security Council of Ukraine on implementing phase one of building the multi-level risk and threat assessment system in the national security area as well as functioning the Center for national security risks and threats assessment in Ukraine. Due to Article 10 of the Law of Ukraine "On the National Defense and Security Council of Ukraine," the decisions are put into effect by decrees of the President of Ukraine and are mandatory for execution by state and local authorities (Law of Ukraine, 1998).

Following that, according to Part two of Article 14 of this Law, the Regulation on the Center for assessing risks and threats to the national security of Ukraine should be approved by a decree of the President of Ukraine. The development of draft decrees of the President of Ukraine on the establishment of the mentioned Center should take into account the requirements of the Decree, adopted by the President of Ukraine (2006).

Therefore, taking into account the above listed conceptual approaches to the establishment and introduction in Ukraine of a multi-level comprehensive system for assessing risks and threats in the field of national security and the peculiarities of legal regulation of the relevant sphere, it is expedient to develop such draft regulatory and legal acts:

1) *an NSDC decision, which includes the following:*

- conducting an annual assessment of risks and threats to the national security of Ukraine on a permanent basis as a part of strategic planning and adaptive management;
- establishing annual reports on results of assessing risks and threats to the national security of Ukraine;
- assessing capabilities to counteract current and projected risks and threats to the national security based on the comprehensive review of the security and defense sector of Ukraine and appropriate sectoral reviews;
- establishing periodic (once every five years) comprehensive reports on the results of evaluating current and projected risks and threats to Ukraine's national security as well as the status of relevant capabilities as the basis for developing the draft National Security Strategy of Ukraine;
- establishing the Center for national security risks and threats assessment of Ukraine as an NSDC supplementary working body or delegating its functions to the Main Situational Center of Ukraine through its transforming into an NSDC working body.

2) *Decree of the President of Ukraine enacting the mentioned decision of the NSDC of Ukraine.*

3) *Decree of the President of Ukraine on approving the Regulation on the Center for national security risks and threats assessment of Ukraine and assigning its head.*

Adopting and implementing the mentioned regulatory and legislative acts will facilitate the development of a strategic analysis and planning system,

enhance the readiness of state and local authorities, and population to respond to crises on various levels of their development, and in general – enhance the national resilience.

1.4.2. Peculiarities of Self-Assessing the Resilience by Government and Local Authorities

An important element of a comprehensive multi-level system for assessing risks and threats in Ukraine should be *self-assessment of resilience*, which should be carried out by ministries, agencies, authorized government institutions, and local authorities within their spheres of responsibility. The purpose of applying such practices is to identify risks and vulnerabilities in the main areas of ensuring national security as well as the organizational resilience of relevant institutions and enterprises of strategic importance and to take timely measures.

Based on the analysis of the best world practices in the field of national resilience and crisis management as well as taking into account recommendations on these issues developed by the UN, OECD, NATO, and other leading international organizations, a general *algorithm* for conducting resilience self-assessment in various fields and areas with relevant recommendations are proposed.

Security Situation Analysis (input data):

- comparison of the main security status indicators within the area of activities with their critical values;
- identification of the generic context of a situation;
- identification of dangerous trends including long-term ones;
- identification of threats to include their manifestations, consequences, and effect on a sector, individual target groups, and other areas;
- identification of factors of negative influence on the sector, which strengthen the impact of an identified threat.

To assess the consequences of the threat influence, it is recommended to

take into account the following *key groups*:

- physical facilities (housing, administrative buildings, networks, etc.);
- human capital (life, health, well-being of the population);
- economic and financial resources;
- environment (natural resources, environmental situation, etc.);
- social and political capital (formal and informal social relationships and networks, management systems, political institutions, peace, security, etc.).

Based on the requirements of a specific sector or branch *special target groups* may be separated (e.g., children, working-age people, retirees, and others).

It is recommended to identify target groups that may be most adversely affected by the threat, as well as those that possess substantial resilience potential and are capable of independently counteracting the threat with acceptable losses of functionality. This will contribute to a more objective definition of priorities in shaping the measures to ensure safety, security, and resilience in a relevant branch or area of responsibility.

To assess the risks and analyze the threats in the branch (area of responsibility) it is recommended to use the following *main groups of indicators*:

- indicators of the state of security in a given area;
- probability of a threat or a crisis occurrence;
- scale and severity of the possible consequences of the implementation of a threat or a crisis.

Capability Analysis

The ability of state institutions, systems, and organizations to respond effectively to the development of the crisis or threat implementation during the following *stages* is assessed.

Ensuring readiness. It is recommended to use the following *key assessment criteria*:

- reliability (availability of necessary resources, adequacy of the settlement of legal and organizational aspects of activities, dissemination of necessary knowledge and skills among the subjects of response, conducting training, and taking measures to prevent the threat);
- availability of reserves (of all types of resources taking into account branch peculiarities and reserve accumulation standards);
- adaptability (availability of alternative supply sources to provide critical functions of the state, forecasts on options for the threat and crisis development, alternative plans for responding to them, flexibility and effectiveness of management systems, including crisis management).

To ensure *continuity of critical functions of the state, it is recommended to assess*: the availability of alternative sources to provide the population with potable water, food, electricity, alternative sources of electricity and drinking water for administrative buildings; alternative premises where state institutions, strategic enterprises, and their employees, as well as temporarily displaced citizens, medical facilities, and victims, can be temporarily relocated; reliability of cyber protection and communication systems; security of data storage and transmission systems, conditions for working remotely to include the need to protect restricted access information; and alternative transportation routes.

Response. It is recommended to assess: the existence of protocols of concerted actions in a crisis which include common response procedures for typical groups of manifestations of threats and crises and their consequences, the possibility of rapid use of additional (reserve) resources; the existence of a clear distribution of responsibility, procedures for coordinating activities in a certain field; the effectiveness of interagency interaction, crisis management, etc.

Recovery. It is recommended to develop in advance: forecasts and possible scenarios for the development of a crisis as well as follow on recovery

based on the time criteria; and the acceptable level of losses in terms of the main target groups (by certain area security indicators and other indicators).

Identification of vulnerabilities

Comparison of threat assessments and the state of relevant capabilities assessments makes it possible to identify branch or area vulnerabilities to certain types of threats. It is expedient to analyze vulnerabilities, first of all, in terms of the main target groups identified for the branch or area.

Using received information (output data)

The results of self-assessment make it possible to draft or clarify *action plans to ensure the security and resilience* of a branch or area of activity and its strategically important facilities including the elimination of identified vulnerabilities and capability building as well as adjusting *strategic development benchmarks*. Particular attention is paid to ensuring effective interagency cooperation, a high level of public confidence in the actions of the state and local authorities, reliable bilateral channels of communication between the state and the population, as well as the continuity of critical services provided to the population and strategically important business.

Schematically, the algorithm for resilience self-assessment in various branches and areas of activity is presented in *Fig. 5.5.*

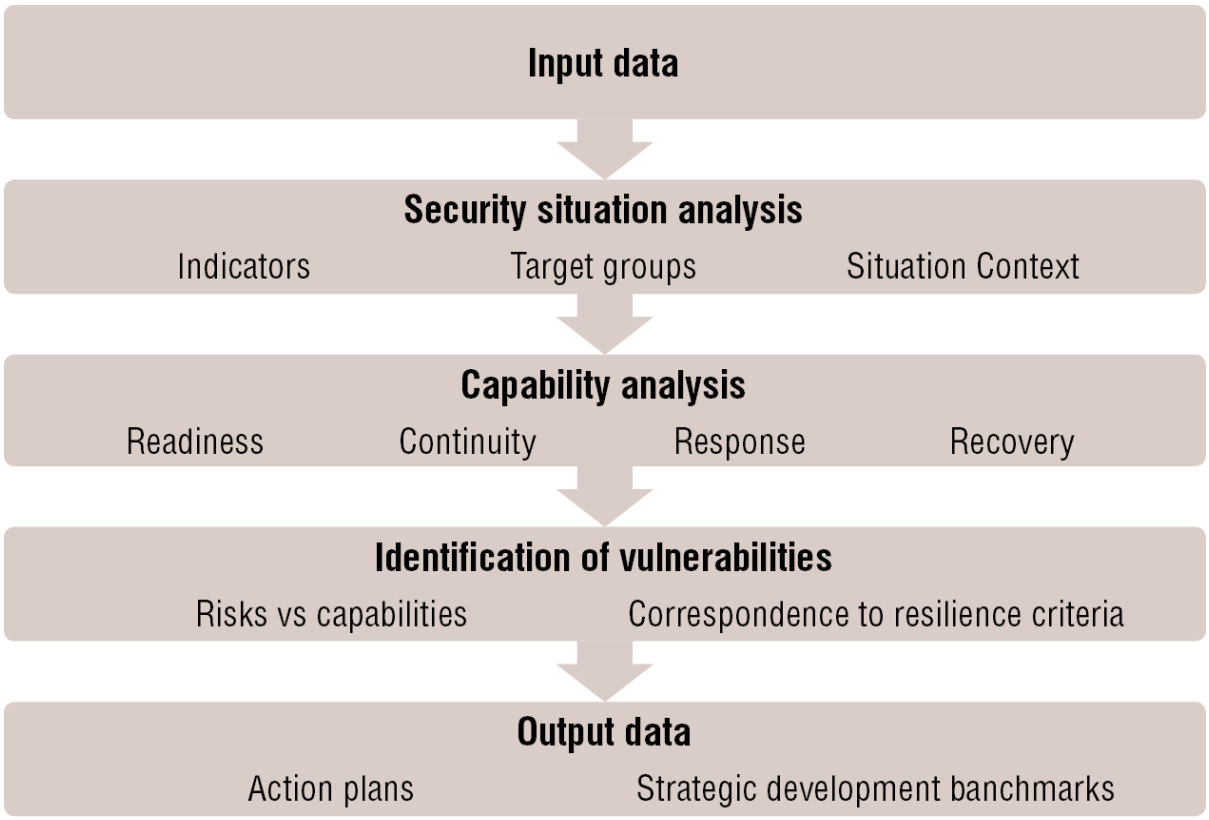


Fig. 5.5. Resilience self-assessment algorithm in various branches and areas of activity.

Source: developed by the author.

To conduct a self-assessment, state and local authorities may be offered a *questionnaire* to fill out with a list of recommended questions (*Annex 3*). The procedure for access to the information contained in answers to questions should be determined by the leadership of the ministry (agency) based on the legislation of Ukraine. The list of questions proposed in the questionnaire can be applied to various branches and areas of activity. However, it should be noted that the resilience assessment of society, communities, critical infrastructure, organizations, and businesses has certain peculiarities. Accordingly, in order to conduct self-assessment in these cases, it is expedient to draft separate lists of questions. In particular, recommendations for assessing the resilience of local communities will be provided in the next subsection of the monograph.

The proposed resilience self-assessment algorithm begins with the analysis of input data, which in the context of a crisis may not be the same for different branches. Thus, in the context of the COVID-19 pandemic, the initial data for the analysis of the biosafety area were dangerous disease spread indicators, and for the economy – the restrictive measures and their consequences for the economy and society. At the same time, typical measures shaping the basis of universal protocols of actions for a crisis in the area of biosafety are those used to prevent the spread of dangerous diseases regardless of their type, and in the economy – those that should be used regardless of the reasons for interrupting business processes (restrictive quarantine measures, disasters, hostilities, etc.)

It is expedient to use the resilience self-assessment algorithm described above during periodic resilience reviews by state and local authorities per the tasks defined within the framework of a comprehensive national system for assessing risks and threats to the national security of Ukraine. The information received should be summarized and analyzed by authorized bodies of the Secretariat of the Cabinet of Ministers of Ukraine and the NSDC of Ukraine, in particular, the Center for national security risks and threats assessment of Ukraine, in order to develop an appropriate national policy and to rapidly make decisions. It should be added that periodic self-assessment performed by ministries and agencies according to the proposed algorithm cannot replace a multi-level comprehensive system for assessing national security risks and threats, since it is only one of its elements.

5.5 Ways to Provide for the Resilience of Regions and Territorial Communities

5.5.1. Introduction of a Potential Model for Organizational Support to Security and Resilience of Regions and Territorial Communities

Given the fact that Ukraine is a country with significant territory and a multi-level administrative and territorial structure, the development of the resilience capacity of local communities and regions is extremely important in a changing security environment. Based on the results of the analysis of the current situation in Ukraine in this area, it can be determined that the actual tasks are to create legal grounds and favorable conditions for the formation and development of organizational, security, social, and other local capacities, the introduction of effective mechanisms for interaction between state and local authorities, public organizations, private business, and international partners, etc.

In its turn, this requires improving coordination and interagency cooperation on regional and local levels, which should take into account the principles defined by the Concept of Support of the National Resilience System (President of Ukraine, 2021g). The extension of a relevant system to the regional and local level, in particular, provides for the clarification of the authorities of its subjects, a certain redistribution of responsibilities including the transfer of certain national security functions to the local levels, establishment of partnerships with business, and the population. The implementation of this approach will provide for greater system flexibility and efficiency, primarily in responding to unexpected and unconventional threats the response to which requires concerted actions of all actors (Reznikova et al., 2021).

According to essential characteristics of the national resilience concept, the main principles of organizing activities in the field of ensuring the resilience of regions and local communities should be determined as follows:

- lawfulness and continuity, which means ensuring an ability to make, explain and implement decisions even during a crisis in a legal, effective and accountable way at any time;
- clear delineation of responsibilities between the state and local authorities while responding to threats and crises of specified scale, origin, and character;
- interaction and cooperation that provides for regular interagency meetings involving representatives from regional executive bodies, local authorities, civil society, business, and mass media;
- responsibility of resilience ensuring actors for their readiness to respond to threats and crises;
- clarity and appropriate transparency of activities in the area of ensuring resilience of regions and local communities.

Today, Ukraine has created some mechanisms for interagency cooperation at the local level in the areas of countering emergencies and terrorism as well as during the legal regimes of state of emergency and wartime. At the same time, to develop a multi-level comprehensive system for ensuring national resilience, this model of interagency interaction and coordination of activities, aimed at strengthening the resilience of regions and local communities, needs to be improved. First of all, such coordinated activities should provide continuity of management and supply of critical services to the population within a region or a local community in peacetime, during the crises or threats of any origin occurrence as well as during the recovery in a post-crisis period. Among other things, this requires defining a clear scheme for the distribution of authority, streamlining the interaction of various national systems and formats based on the interagency cooperation that functions in the field of responding to various threats and emergencies at the territorial level, implementing protocols of concerted actions, primarily regarding threats and emergencies that are most characteristic for the region. At the same time, it is necessary to ensure an

integrated approach to the organization of relevant activities within the framework of a full cycle of ensuring national resilience (monitoring the situation, assessing risks, identifying vulnerabilities, ensuring readiness, planning, preventing, responding, and executing post-crisis recovery).

Taking into account the practice of regional and local level interagency cooperation in the security area in Ukraine as well as world practices, the following main recommendations can be offered for shaping a comprehensive organizational model for ensuring the resilience of regions and local communities:

1. *It is expedient to charge regional state administrations with the lead consolidating role in ensuring regional resilience.* These administrations currently have a lot of power in the area of coordination and ensuring readiness and response to various threats and emergencies. It is expedient to expand their functions to provide coordination of not only territorial subdivisions of central executive bodies, local self-government bodies, enterprises, and organizations, but also the activities of national systems regarding their operations within a relevant administrative-territorial unit.

Besides, the main tasks of regional state administrations in ensuring the regional resilience should include:

- coordination and streamlining activities of various organizational formats (structures) of interagency cooperation that operate within this region;
- establishment of a single secure system for the exchange of information between actors that perform important functions supporting the security and resilience of regions and territorial communities;
- maintaining a regional register of risks and threats;
- facilitating the establishment and introduction of early threat identification and warning systems in the regions;

- controlling the state of readiness of resilience ensuring actors, national systems, and local communities respond to threats and crises within their mandate and their territory;
- coordinating regional, social, and economic development plans with plans for security, resilience, and relevant capability development;
- facilitating interagency exercises and training sessions in the region;
- development of public-private partnership in the area of providing for security and resilience of regions and local communities, interaction with population, and civil society organizations;
- facilitating bilateral communication channels with the population regarding readiness and response to threats and crises;
- promoting the introduction of new technologies in the field of analysis of regional security environment, projecting risks, threat detection, and crisis management.

It is also necessary to identify a clear mechanism for interaction between regional state administrations and the Cabinet of Ministers of Ukraine, National Defense and Security Council of Ukraine, or special bodies established by them in the field of national security and resilience.

2. *The functions, tasks, and composition of local commissions on technogenic and environmental safety and emergencies should also be expanded, transforming them into local commissions for ensuring the security and resilience of regions and local communities.* They should become the main permanent format of interagency cooperation in a relevant field. As part of its functioning, information exchange and coordination of activities for comprehensive risk assessment, threat identification, vulnerability detection, readiness to respond to a wide range of threats, planning of appropriate concerted measures, and post-crisis recovery in the regions should be provided.

It is expedient to involve representatives of not only territorial subdivisions of central executive bodies, local executive authorities, local self-

government bodies, enterprises, institutions, and organizations located on the territory of a relevant administrative-territorial unit but also representatives of territorial bodies of the Security Service of Ukraine [SSU], Armed Forces of Ukraine and other military formations to participate in such commissions on a permanent basis. Taking into account the specifics of the issues submitted for consideration, meetings of local commissions on man-made accidents, environmental safety, and emergencies may be with restricted access or open.

An important area of work of commissions should be providing cooperation with other structures of interagency interaction that function or can be established in the relevant territory. In particular, we are talking about the coordination groups of the Anti-Terrorist Center under the regional SSU offices, the main actors of the national cybersecurity system of Ukraine, defense capability ensuring system of Ukraine (including headquarters of the zones and areas of territorial defense), emergency medical services systems, other interagency commissions and working groups that are established locally.

3. *To discuss and coordinate draft managerial decisions as well as solve other common tasks of ensuring security and resilience of regions and local communities, it is expedient to form a network of subsidiary bodies* consisting of interagency working groups, commissions, regional development agencies, and non-government organizations.

Specialized interagency working groups and temporary control commissions can be established under local state administrations or their structural subdivisions and executive committees created from local authorities to monitor the state of readiness, consistency of plans for security and development of regions and local communities, key institutions, organizations, enterprises. To provide for a comprehensive assessment of risks and capabilities, identify threats and vulnerabilities for the region as well as form and maintain a regional register of risks and threats, it is expedient to establish *an interagency working group on risk assessment* and *an interagency coordination group on*

security planning and resilience. It is logical to assume that their organizational support should be carried out by an authorized structural division within regional state administrations.

It is expedient to form a network of subsidiary bodies from among experienced experts in the fields and sectors of national security, regional and local development, and public activists. United in a common platform, these advisory and control bodies will provide for comprehensive expert, analytical, and informational support to coordination bodies on security, resilience, and development of regions and territorial communities. Regional development agencies and NGOs can contribute to the creation of common capabilities of local communities and regions to ensure their security and resilience.

All supplementary bodies, joined together in an appropriate network, must function together, in a single algorithm of actions, and perform tasks within the framework of certain work programs and technical tasks. Their common tasks should be determined by the following:

- ensuring whole-of-society cooperation in the field of regional development policy shaping and implementation, ensuring security and resilience of regions and local communities as an integral part of the relevant state policy;
- facilitating the work of coordinating with executive bodies within a relevant administrative-territorial unit, in particular, to ensure readiness, prevent threats of various origins, interact with populations, business, and media as well as neighboring regions and territorial communities on issues of ensuring resilience, development of territorial infrastructure, organization of appropriate scientific and methodological work, and technical consultations;
- promoting the implementation of the principles of adaptive management on the regional, local, and community level.

It is also expedient to apply the practice of creating a *network of scientific, analytical, educational, and methodological centers for the development of resilience of regions and local communities*. Such a network can be organized based on existing private and state think tanks, specialized scientific institutions and universities as well as educational and methodological centers for civil protection and safety of life. The following should be determined as key tasks of the centers for the development of resilience of regions and local communities: the systematization of scientific and practical experience in various areas of security and resilience; joint interdisciplinary scientific research on ensuring the resilience of regions and local communities as well as certain branches; independent examination of draft decisions of authorized territorial executive authorities and local authorities; development of concerted actions protocols, instructions, methods, reference books, guidance in the field of development of resilience of regions and local communities as well as recommendations for establishing interagency interaction between different actors in daily activities and crises.

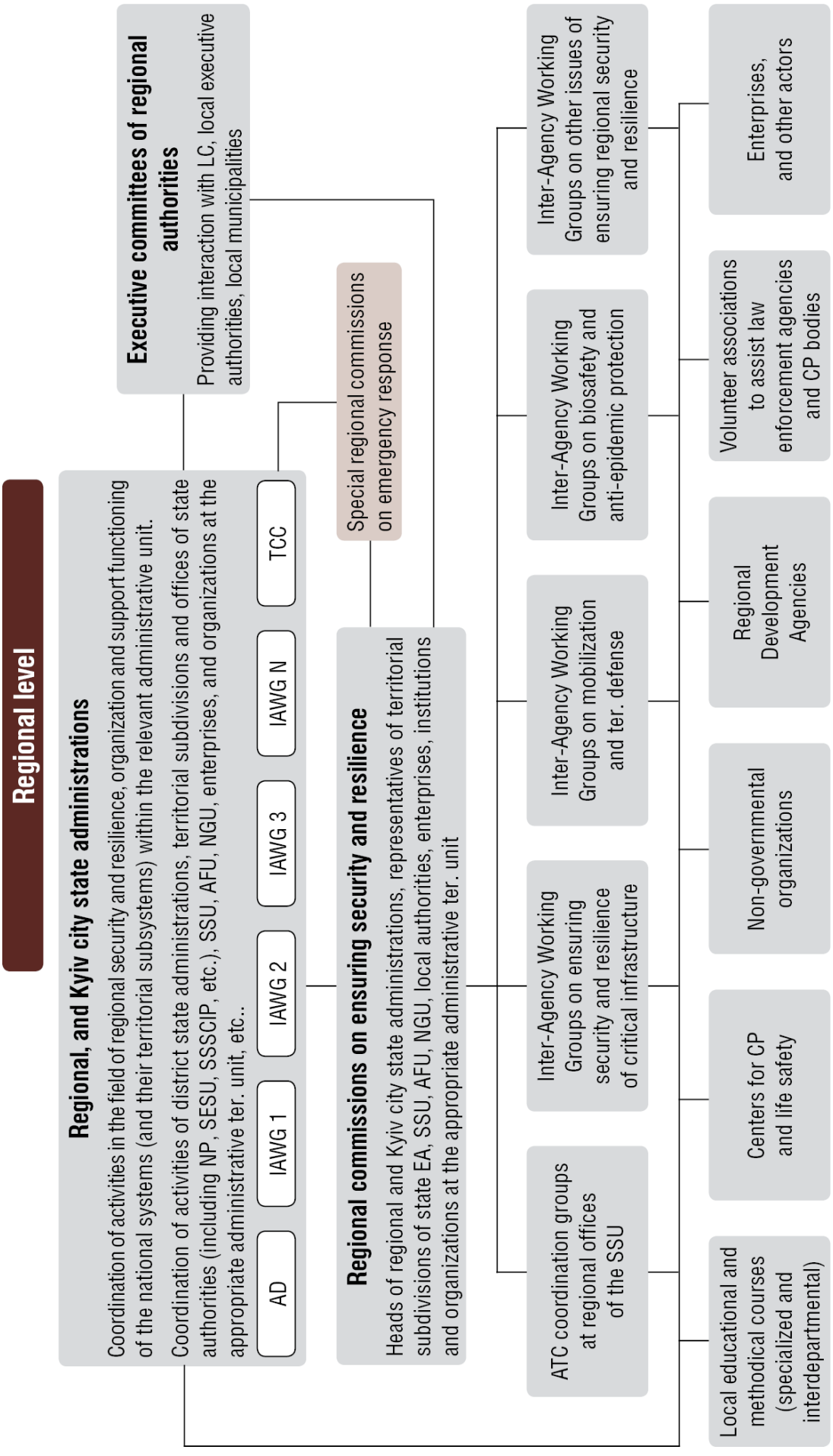
4. *At the level of local communities, the main role in coordinating support for their resilience building should be assigned to local self-government bodies and their executive committees. Regarding interagency cooperation, commissions should be established and charged with ensuring the safety and resilience of local communities.*

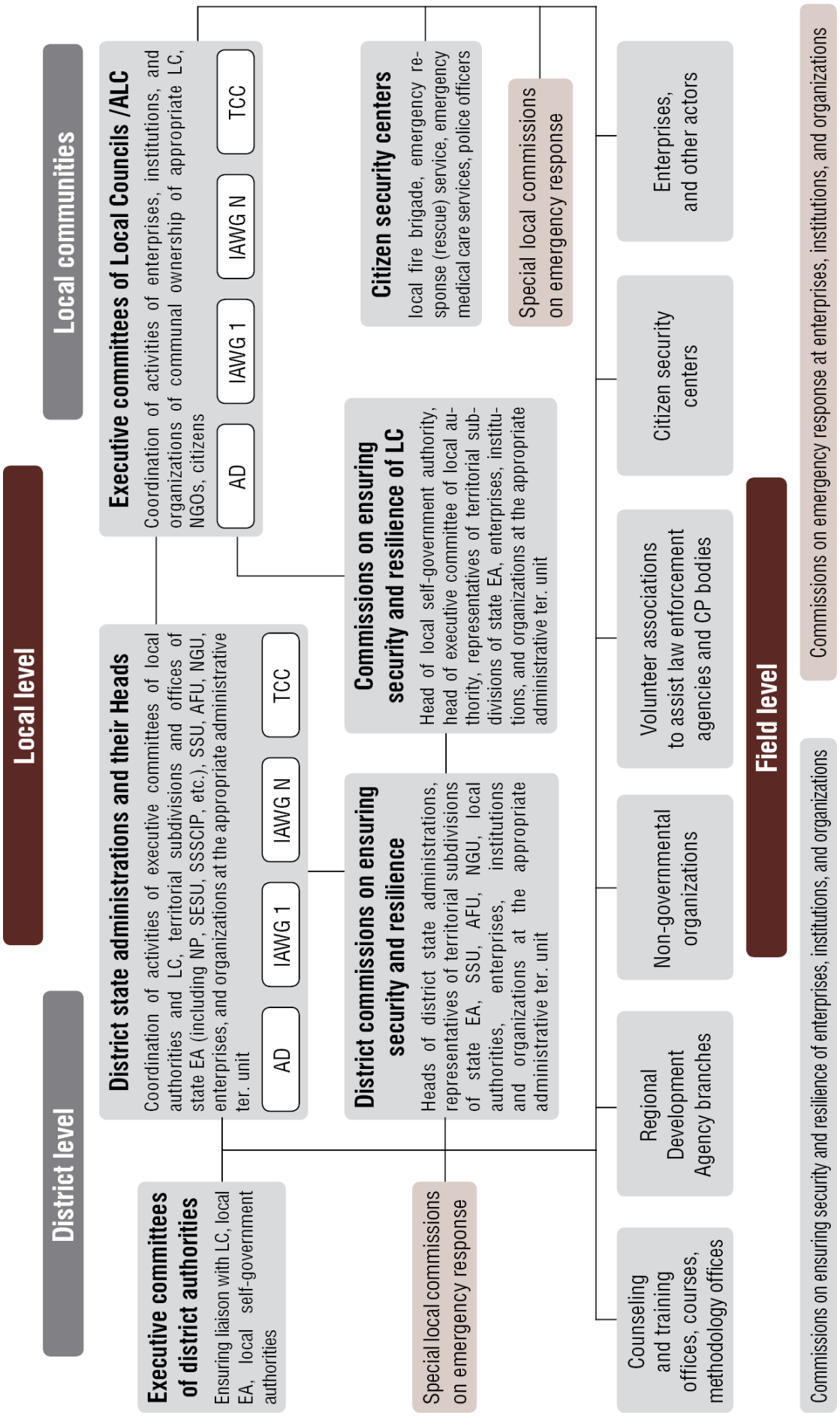
In the context of ensuring the resilience of local communities, the creation of reliable system ties should take place at the horizontal and vertical levels. Taking into account relevant strategic and programmatic national documents and regional development plans, the communities should determine the goals and objectives in the area of providing their resilience as well as their plans to enhance the resilience. There is also a need to periodically assess the progress of their implementation taking into account the established criteria and the expected results to be discussed further.

5. *To strengthen the resilience of regions and local communities it is necessary to form and develop common organizational, security, and other capabilities.* To this end, local authorities are recommended, in particular, to expand the practice of creating citizen safety centers, form a joint network of situational centers at the regional level, to use the potential of regional development agencies, volunteer organizations, private businesses, and the population for the development of infrastructure of a respective administrative-territorial unit, formation of mutually beneficial partnerships, and the implementation of joint programs.

The building or strengthening of territorial security and defense forces (in particular, territorial defense forces, civil protection forces, and public security forces), implementation of programs to promote support by citizens for law enforcement agencies and civil protection forces on the local level, and the creation of associations of citizens who assist local authorities also contributes to strengthening the resilience of regions and local communities, strengthening existing forces, and developing their organizational capabilities.

A prospective model of coordination and interagency cooperation (at the level of permanent organizational formats) in the field of ensuring the security and resilience of regions and local communities developed based on the above recommendations is presented in *Fig. 5.6.* The idea of implementing such an organizational model is based on theoretical conclusions about the resilience of complex social systems, their ability to effectively resist, recover, and reorganize in response to a crisis as well as their adaptability, which is ensured by the non-linear nature of relationships between the elements of the system. As a result, such a system can quickly adapt to new circumstances and focus on the ability to maintain its basic functions even if the system structure changes or collapses in crisis.


Regional level
Regional, and Kyiv city state administrations
Coordination of activities in the field of regional security and resilience, organization and support functioning of the national systems (and their territorial subsystems) within the relevant administrative unit.
Coordination of activities of district state administrations, territorial subdivisions and offices of state authorities (including NP, SESU, SSSCIP, etc.), SSU, AFU, NGU, enterprises, and organizations at the appropriate administrative ter. unit, etc..
AD
IAWG 1
IAWG 2
IAWG 3
IAWG N
TCC
Executive committees of regional authorities
Providing interaction with LC, local executive authorities, local municipalities
Special regional commissions on emergency response
Regional commissions on ensuring security and resilience
Heads of regional and Kyiv city state administrations, representatives of territorial subdivisions of state EA, SSU, AFU, NGU, local authorities, enterprises, institutions and organizations at the appropriate administrative ter. unit
Inter-Agency Working Groups on other issues of ensuring regional security and resilience
Inter-Agency Working Groups on biosafety and anti-epidemic protection
Inter-Agency Working Groups on mobilization and ter. defense
Inter-Agency Working Groups on ensuring security and resilience of critical infrastructure
ATC coordination groups at regional offices of the SSU
Enterprises, and other actors
Volunteer associations to assist law enforcement agencies and CP bodies
Regional Development Agencies
Non-governmental organizations
Centers for CP and life safety
Local educational and methodical courses (specialized and interdepartmental)


Local communities
Local level
District level
Executive committees of district authorities
Ensuring liaison with LC, local EA, local self-government authorities
District state administrations and their Heads
Coordination of activities of executive committees of local authorities and LC, territorial subdivisions and offices of state EA (including NP, SESU, SSSCIP, etc.), SSU, AFU, NGU, enterprises, and organizations at the appropriate administrative ter. unit
AD
IAWG 1
IAWG N
TCC
Executive committees of Local Councils /ALC
Coordination of activities of enterprises, institutions, and organizations of communal ownership of appropriate LC, NGOs, citizens
AD
IAWG 1
IAWG N
TCC
District commissions on ensuring security and resilience
Heads of district state administrations, representatives of territorial subdivisions of state EA, SSU, AFU, NGU, local authorities, enterprises, institutions and organizations at the appropriate administrative ter. unit
Commissions on ensuring security and resilience of LC
Head of local self-government authority, head of executive committee of local authority, representatives of territorial subdivisions of state EA, enterprises, institutions, and organizations at the appropriate administrative ter. unit
Citizen security centers
local fire brigade, emergency response (rescue) service, emergency medical care services, police officers
Special local commissions on emergency response
Special local commissions on emergency response
Field level
Counseling and training offices, courses, methodology offices
Regional Development Agency branches
Non-governmental organizations
Volunteer associations to assist law enforcement agencies and CP bodies
Citizen security centers
Enterprises, and other actors
Commissions on ensuring security and resilience of enterprises, institutions, and organizations
Commissions on emergency response at enterprises, institutions, and organizations

Notes: *AD – authorized department of the local state administration, IAWG – interagency working groups, TCC – temporary control commission, NP - National Police of Ukraine, SESU - State Emergency Service of Ukraine, SSSCIP - State Service of Special Communications and Information Protection of Ukraine, SSU - Security Service of Ukraine, NGU - National Guard of Ukraine, AFU – Armed Forces of Ukraine, EA - executive authorities, LC - local community, ALC – amalgamated local community , CP - civil protection.*

Fig. 5.6. **Prospective diagram for coordination and interagency interaction in the field of ensuring security and resilience of the regions and territorial communities (on the level of organizational structures of interagency interaction that operate on a permanent basis)**

Source: Reznikova et al., 2021.

The above recommendations on establishing coordination and interagency cooperation in the field of ensuring the security and resilience of regions and local communities envisage amendments to a number of regulatory acts. In particular, due to the need to expand the conceptual and categorical apparatus, clarify functions, tasks, authority, and responsibilities of state executive authorities and local self-government bodies in the field of ensuring national resilience, and introduce new organizational mechanisms for its development, it is necessary to amend the laws of Ukraine “On the National Security of Ukraine,” “On the Cabinet of Ministers of Ukraine,” “On the Foundations of State Regional Policy,” “On Local Governance in Ukraine,” and “On Local State Administrations” as well as many other acts regulating the activities of existing interagency cooperation formats at the territorial level.

Implementation of proposed recommendations will facilitate the following:

- improving planning processes at the territorial level through coordination of strategic priorities, programs, and plans in the areas of socio-economic development, ensuring the security and resilience of regions and local communities;

- updating ministers' and agencies' documents on the development of readiness of regions and local communities for certain threats and emergencies taking into account interagency cooperation on the national, regional, and local levels;
- development and implementation of universal protocols for the enhancement of readiness and response to threats and crises, taking into account their interdependencies and potential cascading effects.

In the context of the above, it is expedient to implement a pilot project on the implementation of the proposed model of organizing activities in the field of ensuring the security and resilience of regions and local communities in one of the regions of Ukraine and several local communities. This requires adoption of a national legal act.

5.5.2. Shaping National Policy in Resilience of Regions and Territorial Communities

The generation of program documents in the field of ensuring the security and resilience of regions and local communities should be consistent with the goals and objectives of the relevant national documents. In addition, these documents should determine specific regional goals and objectives and the expected results and criteria for their evaluation. In accordance with the previously proposed conceptual principles for ensuring national resilience in Ukraine, the main tasks in the field of development of resilience of regions and local communities should be developed following such *goals:*

- thinking paradigm shift – the resilience of regions and local communities is built locally, not in the center;
- generation of an adaptive management model provides for the development of alternative goals and plans for the development of regions and local communities, periodic adjustment of programs and plans depending on the results of risk analysis and trends in the development of

the security situation, the definition of targeted guidelines for directed self-management by the communities;

- shaping regional and local leadership;
- introduction of an effective model of coordination and organization of activities in the field of ensuring the resilience of regions and local communities based on whole-of-society cooperation and partnerships;
- ensuring cohesion – uniting citizens around issues of ensuring the security and resilience of regions and local communities;
- generating joint capabilities of regions and local communities to ensure an adequate level of readiness and effective response to threats and a wide range of crises;
- planning improvement – drafting regional and local plans of concerted actions to prevent threats, and ensure readiness, response, and recovery following crises;
- formation of a culture of security by involving citizens and NGOs in programs to support law enforcement agencies and local security centers;
- ensuring effective civil control over the use of resources of regions and communities.

It is appropriate to consider the achievement of the characteristics of a resilient community, which are used, in particular, in the UK. These *main results* should be the focus of relevant state policy,:

- citizens are aware of all the threats and crises that may occur and affect their lives;
- citizens use all acquired skills, knowledge, and existing resources to prepare for the onset of an emergency, its manifestation, and to deal with its consequences;
- citizens adapt their daily skills and knowledge and use them in times of danger;

- communities work in cooperation with local authorities, authorized institutions, and other entities before, during, and after a crisis;
- communities disseminate knowledge among their members about personal protection measures and actions that increase the level of individual resilience, and share their experiences and positive practices with other communities;
- community members are involved in the decision-making process and are interested in community development and in expanding its capabilities (UK Cabinet Office, 2011).

In addition, dynamics of the development of common capabilities of regions and local communities (organizational, economic, social, and security), effective functioning of interagency cooperation structures in the field of ensuring the security, and resilience of regions and local communities can be determined as important results in the relevant area.

The criteria for achieving the proposed results of developing the resilience of regions and territorial communities should be determined as follows:

Resilience criteria of state:

- reliability and sufficiency of organizational, security, social, and other capabilities of a region or local community;
- availability of reserves of appropriate assets or means;
- cohesion of a community;
- maturity of relations between different social groups;
- involvement of the population in economic, political, and other activities within communities;
- trust in local authorities;

Resilience criteria of functioning:

- the efficiency of regional or community management;

- continuity of public and other critical services to the population, and strategically important business processes within the region or a local community;
- readiness of actors responsible for ensuring the resilience of regions and local communities to respond to threats and crises of different origin and nature;
- controllability of the situation before, during, and after the crisis within a region or a local community;
- quality and accessibility of educational activities in the field of ensuring the security and resilience of a region and a local community;
- awareness by members of a community and the population of a region of nature and the type of threats and the courses of action to be taken in the case they occur;
- involvement of community members in the decision-making process within the relevant administrative-territorial unit;
- reliability and efficiency of bilateral communication channels between local authorities and the population;
- creation of joint capabilities in a region and a local community to counter threats or crises;
- use of new technologies in the field of security environment analysis, risk forecasting, threat detection, and crisis management.

To assess the progress of achieving these criteria, self-assessment questionnaires may be developed based on the recommended list of questions provided in *Annex 3* and based on special indicators. It is recommended to carry out assessments of the capabilities of regions and local communities with consideration of the results of comprehensive and sectoral reviews of the security and defense sector of Ukraine.

Conclusions to Chapter 5

The results of a systems analysis of the security environment of Ukraine, including the mechanisms and practices available in the country in the field of national security and resilience, crisis management, and public administration, indicate the need to create a system for ensuring national resilience in Ukraine. Taking into account the limited national resources, it is expedient to establish such a system by way of strengthening and developing existing systemic ties and implementing the principles of resilience in various spheres of social relations, economic activity, and public administration. Taking into account the identity of the actors and objects of ensuring national security and national resilience on the organizational level, it is worth establishing the national resilience ensuring system, as related to the national security ensuring system of Ukraine. In the future, it is worth considering the possibility of transforming both these systems into a comprehensive one for ensuring national security and resilience.

The introduction of systemic mechanisms for ensuring national resilience in Ukraine primarily requires legislative regulation of the conceptual and institutional foundations of the relevant system functioning. It should be noted that the adoption in Ukraine of the Concept of Support of the National Resilience System is an important step in the development of basic legislation in the relevant area. This regulatory document defined the general idea and organizational model of the national resilience ensuring system in Ukraine, basic characteristics of which correspond to conclusions resulting from the study of the peculiarities of the implementation of the resilience concept in national security, namely:

- such a system should be complex and multi-level, organized at the state, regional, and local levels, which should be based on common principles, key processes, and universal mechanisms for ensuring resilience;
- the system shall respond to a wide range of threats and crises;

- key system processes should cover all stages of the national resilience ensuring cycle;
- systems connections should be arranged based on broad interaction between state and local authorities, representatives of science, business, civil society, and population.

Issues of defining authorities, tasks, and responsibilities of national resilience ensuring actors, in particular state and local authorities, enterprises, and organizations, as well as the procedure for involving representatives of civil society in such activities, improving the interaction between the actors in peacetime, in an emergency, and in wartime require further legal settlement based on the Concept of Support of the National Resilience System in Ukraine.

According to the results of the study, it can be argued that building a national resilience ensuring system in Ukraine should, first of all, include the streamlining of organizational ties between actors rather than the creation of new ministries and agencies. It is expedient to solve the problem of establishing effective coordination and organization of activities in the field of national resilience at different levels by way of clarification of the responsibilities or transforming existing state bodies as well as creating organizational formats for interagency cooperation (interagency working groups, platforms, etc.) without expanding the staff of civil servants.

It is expedient to determine one of the key goals of national policy in the field of national security and resilience in Ukraine as the establishment of a new paradigm of thinking, which states that ensuring national resilience is the responsibility of everyone, not only the state, and that the buildup of the resilience of regions and local communities takes place locally and not in the center. The implementation of this approach will contribute, in particular, to strengthening cohesion in the society, creating the basis for uniting people around issues of ensuring security, resilience, and sustainable development of the state, region, and local community, creating joint capabilities to maintain an

adequate level of readiness, and effective response to threats and crises of a wide range. At the same time, this adds relevance to the issue of developing leadership in the state at various levels as well as effective public control over the use of national and local resources for the needs of ensuring national security and resilience.

An urgent task for Ukraine is an introduction of adaptive management, which provides for flexibility and diversity of the national policy in the field of national security and resilience, defining alternative goals and plans at the level of the state, regions, and local communities, implementing directed self-management mechanisms, periodic adjustment of targeted guidelines and plans depending on the results of the analysis and assessment of risks, changes in the security situation, and trends in its development. In this context, it is relevant to create a national system for assessing risks and capabilities and identifying threats and vulnerabilities in Ukraine.

Important for ensuring national resilience in Ukraine is the formation of a culture of security and resilience in the state and in society. This culture would involve the introduction of rules of conduct and skills that would avoid danger or minimize its consequences, and would involve citizens and public organizations in programs to support law enforcement agencies and local security centers.

It can also be stated that planning in Ukraine, as an important element of the national resilience ensuring system, requires improvement of its methodology and organization of relevant processes. The solution of this problem is possible, for example, due to the adoption of the Law of Ukraine “On State Strategic Planning in Ukraine,” amendments to the Law of Ukraine “On National Security of Ukraine” in order to determine the full cycle of strategic planning in the field of national security, establishing universal rules to draft strategic planning documents and plan concerted actions in case of large-scale crises with cascading effects; determining the procedures for interagency

interaction to include use of various resources (both government and non-government), assets, international assistance at different stages of the national resilience ensuring cycle; clarification of the procedure for monitoring and reporting on the status of implementation of the National Security Strategy of Ukraine and other planning documents in the areas of national security and resilience; and improving the procedure for conducting comprehensive review of the security and defense sector of Ukraine and its components regarding the implementation of the assessment of capabilities and readiness to respond to threats, emergencies, and crises as well as the regular self-assessment of state and local authorities on ensuring resilience to certain threats, emergencies and crises.