

Упровадження міжнародних стандартів в місцевому самоврядуванні як ключ до сталого розвитку

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У статті розглядаються найбільш актуальні міжнародні стандарти, створені для сприяння розвитку та підвищення ефективності структур місцевого самоврядування. Проаналізовано роботи вітчизняних та зарубіжних авторів, визначено роль потенціалу місцевого самоврядування у забезпеченні сталого розвитку регіонів. Проаналізовано зв'язок між глобальними цілями ООН та стандартами, прийнятими Міжнародною організацією зі стандартизації для сталого розвитку. Були прийняті до уваги стандарти, пов'язані з роботою органів місцевого самоврядування: ISO 9001:2015 «Системи управління якістю – вимоги», ISO 18091:2019 «Системи управління якістю – Керівництво по застосуванню ISO 9001 в органах місцевого самоврядування», ISO 37120:2018 «Сталі міста та громади – Показники міської служби та якості життя», ISO 31000 «Управління ризиками – керівні принципи», IEC 31010 «Керування ризиком - методи загального оцінювання ризиків», ISO 22301:2012 «Безпека суспільства - Системи менеджменту неперервності діяльності – Вимоги», ISO 20121:2012 «Системи управління стійкістю подій – Вимоги з керівництвом для використання». Висловлено думку щодо відповідності семи принципів управління якістю місцевому самоврядуванню та ступеню їх реалізації в органах місцевого самоврядування в Україні. Розглянуто ключові особливості цих стандартів та їх роль у підвищенні якості життя населення та ефективності роботи органів місцевого самоврядування. Наводяться приклади досвіду впровадження систем управління якістю в місцевих органах влади за кордоном (на основі італійських досліджень) та відгуки про результати. Наведені приклади та пояснення міських показників відповідно до ISO 37120. А як стандарти можуть допомогти підготуватися та належним чином реагувати у найбільш непередбачуваних ситуаціях, сприяти ефективному управлінню ризиками стихійних лих шляхом надання універсальних інструментів та механізмів на міському, державному та регіональному рівнях уряду. Розглянуто можливості застосування міжнародної практики в Україні та важливість впровадження міжнародних стандартів у місцевому самоврядуванні як ключ до сталого розвитку.

Ключові слова: місцеве самоврядування, цілі сталого розвитку, стандартизація, ISO, менеджмент якості, індикатори місцевих послуг, ризик-менеджмент, публічний сектор, публічне управління

Implementation of international standards in local government as a key to sustainable development

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The article deals with the most relevant international standards created to promote the development and increase the efficiency of local government structures. The works of domestic and foreign authors is analyzed, defining the role of the local government potential in ensuring sustainable development of the regions. The link between UN global goals and the standards adopted by the International Organization for Standardization for sustainable development is analysed. Were taken into consideration the standards connected with work of local government authorities: ISO 9001:2015 «Quality management systems – Requirements», ISO 18091:2019 «Quality management systems – Guidelines for the application of ISO 9001 in local government», ISO 37120:2018 «Sustainable cities and communities – Indicators for city services and quality of life», ISO 31000 «Risk Management – Guidelines», IEC 31010 «Risk Management – Risk Assessment Techniques», ISO 22301:2012 «Societal security – Business continuity management systems – Requirements», ISO 20121:2012 «Event sustainability management systems – Requirements with guidance for use». Presented opinion about relevance of the seven quality management principles to

local government and degree of their implementation in local government in Ukraine. The key features of these standards and their role in improving the quality of life of the population and the efficiency of the work of local government bodies are considered. Examples of quality management systems implementation experience in local government abroad (based on Italian research) and feedback on the results are provided. Provided examples and explanation of city indicators according to ISO 37120. And how standards can help prepare and respond properly in the most unpredictable situations, contribute to effective disaster risk management through the provision of universal tools and mechanisms at the city, state and regional levels of government. The possibilities of applying international practice in Ukraine are considered and importance of international standards' implementation in local government as a key to sustainable development were examined.

Keywords: local government, sustainable development goals, standardization, ISO, quality management, indicators for city services, risk management, public sector, public administration

Применение международных стандартов в местном самоуправлении как ключ к устойчивому развитию

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В статье рассматриваются наиболее актуальные международные стандарты, созданные для содействия развитию и повышению эффективности структур местного самоуправления. Анализируются работы отечественных и зарубежных авторов, определяющих роль потенциала местного самоуправления в обеспечении устойчивого развития регионов. Проанализирована связь между глобальными целями ООН и стандартами, принятыми Международной организацией по стандартизации для устойчивого развития. Были приняты во внимание стандарты, связанные с работой органов местного самоуправления: ISO 9001:2015 «Системы менеджмента качества. Требования», ISO 18091:2019 «Системы менеджмента качества. Рекомендации по применению ISO 9001 в органах местного самоуправления», ISO 37120:2018 «Устойчивые города и сообщества – индикаторы городских услуг и качества жизни», ISO 31000 «Управление рисками – Руководство», ИЕС 31010 «Управление рисками – Методы оценки рисков», ISO 22301:2012 «Социальная безопасность – Системы управления непрерывностью бизнеса – Требования», ISO 20121:2012 «Системы управления устойчивостью событий. Требования и руководство по применению». Представлено мнение об актуальности семи принципов управления качеством для местного самоуправления и степени их реализации в органах местного самоуправления в Украине. Рассмотрены основные особенности этих стандартов и их роль в улучшении качества жизни населения и эффективности работы органов местного самоуправления. Приведены примеры опыта внедрения систем менеджмента качества в местных органах власти за рубежом (на основе итальянских исследований) и отзывы о результатах. Приведены примеры и объяснение городских показателей в соответствии с ISO 37120. И как стандарты могут помочь подготовиться и должным образом реагировать в самых непредсказуемых ситуациях, способствовать эффективному управлению рисками стихийных бедствий посредством предоставления универсальных инструментов и механизмов на уровне управления городов, государств и регионов. Рассмотрены возможности применения международной практики в Украине и важность внедрения международных стандартов в местных органах власти как ключа к устойчивому развитию.

Ключевые слова: местное самоуправление, цели устойчивого развития, стандартизация, ISO, менеджмент качества, индикаторы местных услуг, риск-менеджмент, публичный сектор, публичное управление

The problem formulation.

Global environmental change and technological progress stimulate the international community to develop strategies for ensuring sustainable development, safety and quality of people's life. In this regard, the UN in 2015 developed sustainable development goals aimed to improve the welfare and protection of our planet [28]. International organization for standardisation (ISO) has published international standards and related documents, adopted by consensus, which are the basis for innovation, as well as important tools that help governments, industry and consumers to contribute to the achievement of each of the Sustainable Development Goals. The role of active creators of the future on the local level is assigned to local governments, and the key tools for implementing global international strategies are the various standards developed by the International Organization for Standardization, as the quintessence of the work of the best minds and practitioners in the world. In the light of the reform of local government and the territorial organization of power in Ukraine, a comprehension and a scientifically based approach to the application of the best world practices is required to improve the quality and safety of the population life. To fulfil ambitious plans for sustainable development, measures are needed to increase the level of knowledge and awareness of local government employees, which is facilitated by the process of international standards implementation. Improving the efficiency of local governments in turn improves the satisfaction of consumers of their services – the local population.

Taking into account the global changes in the environment of our planet and the pace of technological progress, the international community is trying to create a strategy that will ensure a better and more secure life for people in the future. International standards aim to help local authorities maintain a high level of service while improving sustainability and quality management systems contribute to making local authorities both efficient and reliable.

At this time, we can state the confirmation of the forecast prepared by the experts of

the technical committee of the International Organization for Standardization TC 176, that in the 21st century the gap between societies that have actually entered the global markets and the less developed societies, which will mainly remain within the local markets, will increase. The gap will mainly be observed in terms of access to technology, knowledge, finance and the ability to use these resources, which is reflected in the level of competitiveness of the country. In our opinion, this gap can be overcome only if international standards for management systems will be included in the mechanism of sustainable development of the territory [4].

Ways and examples of implementation of ISO standards abroad still remains important motivation to adopt them in Ukrainian reality helping to increase quality of life for main customers of the local government. Understanding the link between future environmental changes and global urbanization process will help local authorities better prepare for any challenges and keep the confident way to sustainable development.

In this context, the need for further development of approaches to improving the quality of activities in local government authorities and ensuring by them sustainable development of relevant territories is updated through the introduction of standardized practices in accordance with the guidelines of the International Organization for Standardization (ISO).

The research and publications' analysis.

The task of defining the role of the potential of local government in ensuring sustainable development of the region, studying the conceptual foundations of sustainable development of territorial communities and ensuring systematic action in this area is dedicated in the work of such domestic scientists as O. Bobrovska, O. Vasilieva, N. Vasilieva, T. Kravchenko [1–3; 5]. Among foreign and domestic studies in the field of implementation of international standards, in order to ensure the sustainable development of territory we must notice publications of A. Chiarini, E. Gasirowski-Denis, M. Jasiulewicz-Kaczmarek, D. Oliinik, R. Saner, A. Sevastianov, S. P. Sebhatu, R. Weissinger, etc. [4; 10; 12; 13; 22; 24; 25; 27].

International standards as an effective tool to meet challenges of future for local

government considered in various scientific publications in recent years in Ukraine, зокрема за участю авторів статті [6; 9; 11]. Research of international standards implementation in Ukrainian public administration conducted previously in works of T. Mamatova [7; 8; 11].

O. Bobrovs'ka in the article [1] defined the potential of local government in the sustainable development of the region, finding approaches for improving management and rational use of resources to enhance the regional development. In work [2], she also explores the factors influencing the qualitative formation and process of development of regions territories as components of the system «nature – society – man» outlines the types and contents of management functions in relation to the formation and support of development processes and determines the parameters of sustainability and balance of development processes, performance indicators and methods of their calculations.

In the second edition of the monograph [13] the authors took into account new trends in understanding of tasks and mechanisms of sustainable development management, analyzed the possibilities of using international voluntary standards in a transition economy, investigated the main directions of governmental regulation, spatial planning tools, marketing peculiarities in the context of sustainable development. The authors of the monograph paid special attention to the problem of transformation of the traditional system of higher education for the purposes of sustainable development of society.

In the works of A. Sevastyanov [10] the relationship of problems of safety and sustainable development was established, the main generalized components of sustainable development are identified: state, economy, ecology, society, information, international relations, their systemic interconnection is presented. It is shown that the solution of the tasks of each of the selected areas can be supported by specially oriented standards aimed at achieving the goals of the selected component. The tendency towards integration and saturation with standards, to the intensive

development of information security management systems and risk management systems has been demonstrated.

In an analytical note from the National Institute for Strategic Studies [12] the world and European experience of formation of sustainable development of «smart cities» and «smart communities» on the basis of technical regulation in the field of standardization and conformity assessment are analyzed. A number of suggestions on the formation of domestic internal intellectual infrastructure is proposed, it is proposed to launch a national European-style technological innovation initiative in Ukraine and to create a strategic innovation hub for the development and implementation of a balanced development program by 2025, analogous to the 10-year Framework of the United Nations Balanced Consumption and Production Program in the industries, which require a unified strategy and state policy to adhere to international standards and regulations at national level set by the UN, in particular in the filed energy, environment and health care.

Setting paper objectives (aim).

The systematic research of the impacts of applying international ISO standards on the effectiveness of local development in Ukraine has not been conducted yet. That is why the purpose of this article is to examine the international standards' implementation in local government as a key to sustainable development.

The main material presentation.

On 25th September 2015, the UN General Assembly unanimously adopted the 2030 Agenda for Sustainable Development. An ambitious 15-year plan to address some of the most pressing issues faced by the world. It includes 17 Sustainable Development Goals (SDGs) with 169 targets which set quantitative and qualitative policy objectives for the next 15 years. It also includes 230 indicators to measure the countries' progress in implementing the SDGs. The goals and objectives span across the social, economic, and environmental dimensions of sustainability and are supposed to be achieved

Table 1.

Examples of United Nations Sustainable Development Goals
and related ISO standards

Standards	Title	The goals of sustainable development, the implementation of which will be supported by the international standard
ISO 9004:2018	Quality management – Quality of an organization – Guidance to achieve sustained success	8, 9, 10
ISO 18091:2019	Quality management systems – Guidelines for the application of ISO 9001 in local government	8, 9, 10, 16
ISO 14001:2015	Environmental management systems – Requirements with guidance for use	1–9, 12–15
ISO 20121:2012	Event sustainability management systems – Requirements with guidance for use	3, 5–13, 16
ISO 22301:2012	Societal security – Business continuity management systems – Requirements	6–9, 11, 16
ISO 31000:2018	Risk management – Guidelines	3, 8, 9, 11, 14–16
ISO 37001:2016	Anti-bribery management systems – Requirements with guidance for use	8, 10, 11, 16
ISO 37101:2016	Sustainable development in communities – Management system for sustainable development – Requirements with guidance for use	1–16
ISO 37120:2018	Sustainable cities and communities – Indicators for city services and quality of life	3–6, 8, 10, 11, 13, 16
ISO/DIS 37122	Sustainable cities and communities – Indicators for smart cities	3–8, 10, 11, 13, 16
ISO/DIS 37123	Sustainable cities and communities – Indicators for resilient cities	3–8, 10, 11, 13, 16
ISO 50001:2018	Energy management systems – Requirements with guidance for use	7, 11–13

Sours: [4].

by 2030 [24]. Clear explanation of all goals could be found on the web page of United Nations [14] (Table 1). The SDGs represent a plan to enhance peace and prosperity, eradicate poverty and protect the planet. They are recognized globally as essential to the future sustainability of our world.

With aim to maximize the benefits of international standardization and ensure the uptake of ISO standards, ISO helping

to meet the United Nations Sustainable Development Goals (SDGs). Economic, environmental and societal dimensions are all directly addressed by ISO standards. Organizations and companies looking to contribute to the SDGs will find that International Standards provide effective tools to help them rise to the challenge [28].

All above mentioned standards play important role in SDGs implementation,

but in this article will be consider only few of them. The link between global goals and local government can be found even in the formulation of goals. For example, goal 11 – «Make cities and human settlements inclusive, safe, resilient and sustainable».

More than half of the world's population lives in a city and that number is to grow to nearly 70 % by 2050. Keeping up with rising urbanization and the stress it places on resources and infrastructure poses a serious challenge for cities everywhere, creating the need for effective planning, management and evidence-based policy making [26]. Thus, on 25th March 2019 was officially published a new revision of ISO 18091:2019 «Quality management systems – Guidelines for the application of ISO 9001 in local government» [18].

The public sector is the largest service provider in any country, offering a broad array of services that directly affect residents' lives. The challenges are many, not least balancing the expectations of citizens with budget constraints, environmental impacts and demographic changes. In these tough economic times, local governments need to effectively manage the available resources and processes and work together as a system.

This is where ISO 18091 «Quality management systems – Guidelines for the application of ISO 9001 in local government» makes a real difference. The recently updated standard aims to help local authorities maintain a high level of service while improving sustainability. It provides diagnostic models and tools for implementing a comprehensive quality management system that will contribute to making local authorities both efficient and reliable.

ISO 18091 is the first ISO standard directed at the public sector that gives guidelines for the implementation of ISO 9001 in local government, taking account of the context in which it

operates. It has been updated to include the requirements of ISO 9001:2015 for quality management systems and a series of annexes to help users get the most out of the standard, including a diagnostic methodology for local authorities to evaluate the scope and maturity of their processes and services [16].

This ISO 18091 standard contributes to the following Sustainable Development Goals: «Decent work and economic growth» (8); «Industry, innovation and infrastructure» (9); «Reduced inequalities» (10); «Peace, justice and strong institutions» (16).

In our opinion, this should direct local government and other interested parties when setting priorities for the development of the territory and preparing regional and local development projects.

Structure of the standard are the same as ISO 9001:2015 and special feature of the standard are annexes (local government assessment tool for integral quality management, processes for integral quality management, integral citizen observatories, relationship between UN Sustainable Development Goals and other measurement and management systems) [23]. These annexes designed to help local government structures moving towards implementation of SDGs. The standard supports the application to local government of the seven quality management principles from ISO 9000. The relevance of the seven quality management principles to local government and our assessment of degree of their implementation in the practice of local government in modern Ukraine is given in Table 2.

ISO 18091 is the first ISO standard for the governmental sector that gives guidelines for the implementation of ISO 9001 in local government. With a quality management system, a local government

Table 2.

The relevance of the seven quality management principles to local government and degree of implementation in local government in Ukraine

Title	Meaning	The degree of implementation in local government in Ukraine
Customer/citizen focus	Local government exists to serve its customers, i.e. its citizens	Is implemented, needs further development
Leadership	Top management is the head of local government and should create a vision and provide direction to achieve goals and targets that meet the needs and expectations of the citizens	Implemented actively
Engagement of people	All people should be involved in local government processes, including voluntary participation and citizens taking part in the activities of local government	Actually, not implemented, needs urgent attention
Process approach	The logical framework and the approach to results in a local government should be based on processes	Actually, not implemented, needs urgent attention
Improvement	It is essential to maintain performance and search for new opportunities to improve processes and enhance the satisfaction of its citizens	Is implemented, needs further development
Evidence-based decision making	Use of evidence and data analysis should provide the base for improving the quality management system and its processes	Is implemented insufficiently, needs further development
Relationship management	Local government should pay attention to how it relates to citizens, external providers and partners, and to its horizontal and vertical relationships	Is implemented insufficiently, needs further development

Sours: O. Bortnik based on [18].

can direct its activities to satisfy the needs and expectations of the local community. Local governments are the most important suppliers in the world. Their activities can include transportation, education, water supply, waste collection, sewage and drainage, public lighting and civil protection. If these activities are unreliable or lack quality, it can mean a lot of problems for a lot of people. ISO 18091 is an essential map for local governments to organize themselves in a comprehensive way, focusing on continual improvement where it matters. It will: empower citizens and governments together; produce not only effectiveness but legitimacy; provide

a common language and understanding between politicians and technicians, and enable comparability among countries and other local governments; serve the local population by making politically viable those things that are technically indispensable; create a useful tool for the UN millennium goals and objectives for a sustainable world and smart cities; produce reliability – essential for society [21].

The authors describe the main features of the SDGs and of urban development and suggest that an application of ISO 18091 could be a practical method to ensure continuity of administrative performance needed to sustain implementation of the SDGs at local authority

level. These two targets are aligned with good governance principles often deficient or underdeveloped in many countries. The two targets are: 16.6 Develop effective, accountable and transparent institutions at all levels 16.7 Ensure responsive, inclusive, participatory and representative decision making at all levels. The two principles which particularly stand out in relation to SDG 16.6 and 16.7 are customer focus and engagement of people. In ISO 18091, the quality management system is applied to local government instead of to an organization, thus the term «customer» used in ISO 9001 has been changed to «citizen». ISO 18091 calls on the responsibility of local governments to create sustainable local communities. It states that an environment should be created where citizens feel that their local government represents them.

A quality management system such as ISO 18091 will always be subjected to differences in local government in regards to policies, objectives, work methods, resource availability, administrative practices as well as terms and definitions. However, the importance lies not in creating a one-size fits all solution, but about establishing an easy to understand system within the local context that will yield consistent, effective and reliable results. ISO 18091 puts an emphasis on local government's transparency and accountability and views them as vital in gaining citizens' trust and confidence. This value orientation is in line with SDG 16.6 and 16.7.

A deployment of ISO 18091 would provide a process framework that could guide the inner workings of a local administration and could enable more rational and transparent decision-making processes with all its variants. Institutional learning and innovation cannot happen at the system wide level when actions taken and decision made are not monitored nor retrievable for review by the Programme administrators and citizens. They remain

sporadic, ad-hoc and personal. Pilot projects are needed to test the applicability of ISO 18091 for SDG implementation [24].

But what are the reasons which lead an organization within the public sector to get an ISO 9001 certificate? And, to be more focused, what are the benefits in terms of improvement of performances? Are they the same as the private sector?

According to Accredia, the Italian National Accreditation Body appointed by the Italian state, in Italy at the end of 2013 about 1,300 organizations within the public sector owned a certificate of compliance to the ISO 9001 standard. These organizations belong to across-the-board sectors such as central and local government, army, public utilities, education and the national healthcare system. Of the 1,300 organizations, 360 are dedicated to local government services and have got ISO 9001 certification [15].

From a preliminary semi-structured interview with an initial sample of ten quality managers inside local government organizations (LGOs), 11 hypotheses about improvements in performance achieved through the implementation of ISO 9001 were stated. The hypotheses were transformed into questions with a cumulative scale within a questionnaire and, in the following five years, 201 quality managers of Italian LGOs have completed the questionnaire. The questionnaire was administered twice to the quality managers: before the organizations got the certification and then later when the organizations were certified.

Positive Summary of research [15]: according to the notes left by 46 out of 201 quality managers interviewed, usually ISO 9001 has had a positive effect on the improvement of the organization as a whole, including all the processes and the services provided to the citizenship. In this way, once the organization has implemented a QMS in compliance with

ISO 9001 requirements, citizens' satisfaction starts increasing (1); the organizations become more aware of defectiveness in processes because they simply start measuring how many defects they have had over time (2); claims are reduced (3); the respondents believe that ISO 9001 has introduced a relevant staff awareness about citizens' needs and requirements (4); the respondents believe that ISO 9001 certification positively affects the performance measurement system; the introduced performance measurement system has allowed the company to measure improvements and to use the results for a benchmarking process (5); the most important effectiveness performance improved by ISO 9001 is customer satisfaction (6).

Due to the ISO 18091 «customer/citizen» is a person or organization that could or does receive a product or a service intended for or required by them. Standards explain that customer/citizen refers to an organization, community or person that receives a product and service from the local government, whether in return for payment or not. Expected that Local governments will recognize the various customers/citizens and will achieve a balanced response to all their needs and expectations. For example, inhabitants, neighbours, tourists, natives or some citizens who are taxpayers, and whose contributions serve to finance the products or services of the local government, might not be the same citizens as those who benefit most from the products or services provided, as described in relevant public policies.

Due to our investigation [11] working experience traditionally in Ukrainian local government structures was lack of understanding among employees who is the real customer of local government. During communication typical answers leads to other governmental authorities at the high level such as ministries, state administrations etc.

A less expected result is that ISO 9001 in local government organisations (LGOs) does

not seem to improve performances such as internal communication and teamwork. The reasons for this mainly lie in the bureaucracy introduced by strict and formalized rules and roles. According to the respondents, documentation and formalization of processes by means of procedures could make decision-making activities inflexible.

Last, but not least, another controversial and debated issue has been negatively confirmed. The respondents validated through their questionnaire answers, and better expressed with their notes, that ISO 9001 has not improved efficiency performances such as cost reduction. Two quality managers even declared an increase in costs due to the bureaucracy and the external auditing system [15].

Another important standard is ISO 37120:2018 «Sustainable cities and communities – Indicators for city services and quality of life» [20] was developed by ISO/TC 268 «Sustainable cities and communities» and published on 05th July 2018.

Cities need indicators to measure their performance. Existing indicators at the local level are often not standardized, coherent, or suitable for comparison in time or between cities. This document focuses on city services and quality of life as a contribution to the sustainability of the city.

As part of a new series of international standards developed for a holistic and integrated approach to sustainable development, which includes quality indicators for urban services and quality of life, indicators for smart cities and indicators for sustainable cities, this set of unified indicators provides a unified approach to what is measured, and how this measurement is carried out. As a list, it does not provide judged judgment, threshold or target numerical value for indicators.

These indicators can be used to track and monitor the progress of the city's work. In order to achieve sustainable development,

Table 3.

Examples of city indicators according to ISO 37120

Theme	Indicators
Economy	Unemployment rate; percentage of persons in full- time employment
Education	Number of higher education degrees per 100 000 population
Energy	Electricity consumption of public street lighting
Environment and climate change	SO2 concentration, greenhouse gas emissions, noise pollution
Finance	Tax collected as a percentage of tax billed
Governance	Women as a percentage of total elected to city-level office, voter participation in last municipal election
Health	Average life expectancy, number of physicians per 100 000 population
Housing	Percentage of city population living in inadequate housing, number of homeless per 100 000 population
Population and social conditions	Percentage of city population living below the international poverty line
Recreation	Square metres of public outdoor recreation space per capita
Safety	Number of firefighters per 100 000 population, number of deaths caused by industrial accidents per 100 000 population
Solid waste	Total collected municipal solid waste per capita, percentage of the city's hazardous waste that is recycled
Sport and culture	Number of cultural institutions and sporting facilities per 100 000 population
Telecommunication	Number of internet connections per 100 000 population
Transportation	Annual number of public transport trips per capita, kilometres of bicycle paths and lanes per 100 000 population
Urban/local agriculture and food security	Amount of food produced locally as a percentage of total food supplied, percentage of city population that is overweight or obese
Urban planning	Green area (hectares) per 100 000 population
Wastewater	Percentage of city population served by wastewater collection
Water	Total water consumption per capita, total domestic water consumption per capita

Sours: O. Bortnik based on [20].

it is necessary to take into account the entire city system. Future planning needs to take into account the current use and efficiency of resources in order to better plan tomorrow. Indicators and related test methods in this document have been developed to help cities: measure the effectiveness of management of urban services and quality of life over time (1); learn from each other, allowing to compare a wide range of measures of effectiveness (2); support policy development and prioritization (3). The indicators in this document [20] have been chosen in such a way that reporting is as simple and inexpensive as possible and therefore reflects the basic reporting platform.

The ISO 37120 standard includes 24 sections that include different types of

indicators in different areas (Table 3). Indicators are divided into key and supporting. Each section describes the requirements for the indicator and source of information. The ISO 37120 also accommodates the third category of indicators – profile indicators – which are recommended for providing basic statistics and basic information to help cities in the homogeneous comparisons contained in the appendix to the standard.

In May 2019, the World Council on City Data (WCCD) created an «Open City Data Portal», available at <http://www.dataforcities.org/>. This site has an up-to-date register of cities certified to comply with ISO 37120 in the World Council on City Data certification system [17]. This site allows anyone, from city

representatives and scholars to any interested public, to access data collected through ISO 37120 and published by the WCCD, which includes: London, Toronto, Boston, Los Angeles and Dubai.

Standards can not only affect the ways of preparing for natural disasters in the city, but also the ability to receive payments from government, international organizations or insurance companies. Due to climate change and the increase in the number of natural disasters, issues of sustainability and sustainability of cities are gaining increasing importance. Standards can help prepare and respond properly in the most unpredictable situations, contribute to effective disaster risk management through the provision of universal tools and mechanisms at the city, state and regional levels of government.

For example, ISO 31000 «Risk Management – Guidelines», developed by ISO / TC 262 (Risk Management), is used in many countries to understand and mitigate the effects of risk events, this occurs in through the creation of management structures, reducing the susceptibility to failures and through the search for preventive and responding to the circumstances of the decision in the fight against natural or man-made events. On the other hand, ISO / TC 262 is responsible for a range of international standards for the safety and continuity of management that facilitate the work of organizations in preparing for emergencies and disasters. One of the most well-known documents is IEC 31010 «Risk Management – Risk Assessment Techniques» [4]. The international standard ISO 22301:2012 «Societal security – Business continuity management systems – Requirements» also take on meaning in the context of ensuring sustainable development of the territory [19]. Creating management systems based on it allows to reduce the probability of devastating incidents occurrence and increase the readiness of the organization to react quickly and properly

to their occurrence and thereby reduce potential losses.

Conclusions.

Taking into consideration above mentioned experience it is important to make a conclusion that international standards prove their benefits for local government abroad. Nevertheless, implementation of any standards for sustainable future of Ukrainian local government need special approach and further research of methods and motivation to reduce costs and improve services on the way of international cooperation development and growth of citizens quality of life.

The use of principles and established practices recognized at the level of international standards will enable local government to demonstrate their own credibility and ensure the sustainability of development of the respective territory and community. Therefore, approach to improve the quality of activities in local government authorities through the implementation of standardized practices in accordance with the guidelines of the International Organization for Standardization (ISO) ISO 18091, ISO 22301, ISO 31000 and ISO 37120 are perspective.

According to the results of the study, the approach to assessing the processes of development of the joint territorial communities has been further developed through monitoring of the sustainability of the respective territory and community using three categories of indicators of performance of local services and quality of life according to ISO 37120: key, supporting and profile that were recommended to provide basic and statistical information to help cities conduct homogeneous comparisons and benchmarking.

The scientific and methodological support of ensuring the sustainability of local events requires further researches and the receipt of

positive economic, environmental and social consequences, minimum waste, reduction of electricity consumption and other resources due to ISO 20121:2012 «Event sustainability management systems – Requirements with guidance for use».

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