

“Osint” and “consolidated information” in the terminological field of information and analytical activity

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Abstract. The purpose of the study is to reveal the content of the terms “OSINT” and “consolidated information” in the terminological field of information and analytical activity, to identify similarities and differences between them. Research methodology. General scientific research methods of analysis and synthesis were used; the method of comparative analysis to compare the essence of the terms OSINT and consolidated information; the method of content analysis in the study of texts and documents; the hypothetical method to substantiate the synonymy of the terms OSINT and consolidated information. The scientific novelty lies in the identification of analogies between the terms “OSINT” and “consolidated information”, which form a terminological series in the scientific discourse and practical field of information and analytical activities. Conclusions. The terminological field in the scientific discourse and in the field of practical information and analytical activities is characterised by the formation of a synonymous series, which includes the terms “OSINT” and “consolidated information”, which are actually designations of the concept of “information and analytical activities”. An analysis of the content of these terms shows that the difference is that the content of the concept of “consolidated information” does not indicate a specific field of activity, while OSINT retains the relevant connotations in the application of the term in other areas. OSINT in its meaning, regardless of the scope of use in intelligence activities, is a type of information and analytical activity which is gaining active development in the modern information and communication space to perform a wide range of tasks in social practice aimed at searching, collecting and analysing information from open (publicly available) sources which are not classified or restricted

Keywords: OSINT; consolidated information; information and analytical activities; terminology

Relevance of the research topic

Information and analytical activities are systemically important in all areas of social practice – from the implementation of special measures aimed at supporting national interests and state policy to competitive intelligence, HR, and business analytics.

It should be noted that in the scientific discourse, along with the established concept of “information and

analytical activity”, the terms “consolidated information” and “OSINT (Open Source Intelligence)” are present as components of the terminological field – a set of terms connected by a common content and common semantic properties.

Taking into account that synonymy is caused by the constant development of science accompanied by the

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emergence of new concepts and the desire to give each concept the most accurate name, it seems relevant in this context to clarify the meaning of the terms “OSINT” and “consolidated information” inherent in the field of information and analytical activity for the unambiguous perception of texts in scientific discourse.

Analysis of research and publications

In the field of attention of representatives of philological science are the studies of general scientific terms. Thus, in the article by H.I. Krokhmalna (2017) attention is paid to the definition of the general scientific term “analysis”. The researcher notes that the term indicates the most general features of the concept without indicating belonging to a particular scientific field, which confirms the “neutrality” and general scientific characteristics of this word unit. However, when combined with other lexemes, this term is able to specify the scope of use and a certain branch.

The term “information and analytical activity” is not yet standardised, its essence and content remain the subject of scientific studies. Thus, researchers distinguish two levels of information and analytical work (Soroka & Soroka, 2012):

1. The information level is the search, collection, storage, and dissemination of information.

2. Analytical level – generalisation, classification of information, its analysis and transformation, development of conclusions, proposals, recommendations and forecasts.

In scientific publications, there are definitions of information and analytical activity, in which the authors focus on its various components. Thus, in particular, in the definition by V.M. Varenko (2014) the technological processes of processing and retrieval and the obtained information and analytical products are emphasised:

Information and analytical activity is a specific kind of intellectual and mental activity of a person, in the process of which, as a result of a certain algorithm of sequential actions to search, accumulate, store, process, and analyse primary information, while new, secondary analytical information is formed in the form of an analytical report, review, forecast, etc.

In the definition of information and analytical activity, proposed in the article by V.V. Zahumenna & O.I. Kuzmenko (2022), the value component for the end-user of the information and analytical product is highlighted:

Information and analytical activity is a specific multi-level type of information activity aimed at analysis, generalisation of information circulating in society (analytical component) for the development of information and analytical products (intellectual component) both to meet the information needs of users in various industries, and to make management decisions.

It should be noted that the above definitions are complementary and outline the information and analytical activities in its main aspects. In the system of

law enforcement, the term analytical intelligence is also used (Movchan, 2017), which is defined as a special form of information and analytical work, which is based on the organic unity of all forms of this work and consists in the acquisition of new knowledge about an object or phenomenon on the basis of analytical processing of the obtained operational and investigative information about persons, events, objects of operational interest. Referring to the linguistic analysis of the terms “intelligence” and “search”, the authors of the publication consider the phrases “analytical intelligence” and “analytical search” to be synonymous.

Publications devoted directly to OSINT topics cover applied issues of using OSINT technologies in various fields (Matvienko & Tsyvin, 2023; Pashkovskyi, 2022; Yarovy, 2019), and the consolidated information is considered in the aspect of training specialists (Krokhmalna, 2017; Matvienko, 2008), available textbooks on consolidated information (Matvienko & Tsyvin, 2014), the formation of consolidated resources of institutions is considered in the context of the national cultural and historical heritage (Lypak, 2019).

These and other scientific publications outline the content field of information and analytical activities, offer its definitions, identify the applied aspects of the use of OSINT and consolidated information, and serve as a theoretical and methodological basis for further study of subject issues and problems in this area.

The purpose of the study is to reveal the content of the terms “OSINT” and “consolidated information” available in the terminological field of information and analytical activities, and to identify analogies and differences between them.

Statement of the main material

The general principles of OSINT activities are formulated in Washington Plett's book “The Work of Strategic Intelligence. Basic Principles”, published in 1957, which set out the principles and methods of information work of strategic intelligence and the possibility of using the knowledge and methodology of social and natural sciences in this work (Platt, 1957). As the author noted, one of the goals of the book he wrote was to initiate the development of the doctrine of information intelligence.

W. Plett, outlining the topic of his research, notes that it is devoted to the information work of intelligence, which covers all types of activities carried out by an intelligence researcher, who has been tasked with concluding an information document on any issue. W. Plett defines information work as the process by which “raw” facts are transformed into completed products of intelligence activities intended for the bodies that implement or develop the political course of the country. W. Plett's information work includes all types of activities related to the planning, control, and coordination of information work, and editing of information documents (Platt, 1957).

Information intelligence work has become a factor in the formation of OSINT as one of the intelligence disciplines (Intelligence Collection Disciplines) in the activities of US intelligence services, along with such as HUMINT (Human Intelligence) – obtaining information with the help of human intelligence, (IMINT Image-intelligence) – collecting intelligence information based on a large number of images, etc.

In 2001, the concept of OSINT was outlined in the NATO Open Source Intelligence Handbook (2001), which recognised OSINT as an important component of NATO's future vision and defined OSINT as unclassified information that has been specifically identified, selected, refined and disseminated to a selected audience to achieve a specific purpose.

The document states that OSINT is a major new "force" in 21st century information operations and emphasises that OSINT is not "new", that states and organisations have always understood the value of direct observation, systematic reading, and legitimate acquisition of information services. What is new in OSINT is the combination of such trends as the spread of the Internet as a tool for disseminating and sharing open information; the associated "information explosion" in which published knowledge is growing exponentially (NATO Open Source Intelligence Handbook, 2001).

The U.S. National Intelligence Estimate (U.S. National Intelligence, 2011) presents six steps of the intelligence cycle, where OSINT is listed as one of the sources of intelligence: planning and management – data collection – processing and use – analysis and product production – dissemination – evaluation, and discloses their content:

- planning and management – identifying customer requirements and planning activities;
- data collection – the collection of raw data related to the five main sources of intelligence (GEOINT, HUMINT, MASINT, OSINT, and SIGINT) required to produce a finished product; raw data sources may include, but are not limited to, news reports, aerial photographs, satellite imagery, and government and public records;
- processing and use – converting raw data into an understandable format that can be used to produce a finished product;
- analysis and production – synthesis, evaluation, analysis, and preparation of processed information for inclusion in the finished product;
- distribution – transfer of the finished product to the customer; at this stage, gaps can be identified, after which the exploration cycle starts again;
- evaluation – continuous assessment and feedback from customers to adjust and improve activities and analysis to better meet the changing and evolving information needs of customers.

OSINT, as an information and analytical activity, using a set of measures, tools and methods to obtain and analyse information from open sources in the

context of the active development of digital technologies, conceptually corresponds to the concept of "space of flows" proposed by the Spanish sociologist Manuel Castells (Saracevic & Judith, 1981). His idea is that in the age of digital technologies, when a network society is being formed, a new type of space emerges – the space of flows based on a continuously changing space of interactions. M. Castells considers this concept in a continuous connection with the concepts of social action and social time and hypothesises that the space of flows is the dominant spatial form of the network society.

M. Castells defines the concept of "space of flows" as material support for social practices distributed in time and transmitted over distance, and understands flows as purposeful, repetitive, programmed sequences of exchanges and interactions between physically separated positions occupied by social actors in the economic, political, and symbolic structures of society. Such exchanges and interactions form information flows in social space, both in the traditional and digital space of interaction.

The concept of "information flow" is used by Ukrainian researchers mainly in the study of narrowly focused information flows in the activities of enterprises of various industries in their internal and external economic activities. In the context of OSINT activities, the focus is on information flows that are formed in the mass communication system, in particular, in the information field of Internet communications, as a result of the reflection of social activities of society members.

Information flows are analysed in three ways:

- syntactic – formal rules (parameters) for building an information flow and the relationship between its elements are established;
- semantic – each element of the information flow is interpreted;
- pragmatic – the degree of usefulness of each element of the information flow for the purposes of the study is defined (Yezhova, 2002).

When analysing information flows in the constantly changing Internet information environment, OSINT research is based on the laws and patterns of growth, concentration, dispersion (Bradford's Law), aging of information and sources, the theory of information retrieval and consolidation of information inherent in the theory of information and analytical activity. Among the methods and technologies used in OSINT are information expertise, information diagnostics, information monitoring, and information modelling of situations.

The study of information flows, as the essence of OSINT activities, is carried out using the types of analysis inherent in information and analytical activities:

1. Quantitative analysis takes into account such parameters as the number of information sources, their volumes, indicators of information dissipation and its obsolescence, the number of authors, the number of user reactions.

2. Qualitative analysis is based on studying the content of information, determining the value, reliability and completeness of information related to ideas, research methods, physical principles, design solutions, technical, economic and operational characteristics of products, economic and marketing factors, etc.

3. The analysis of information links involves identifying the relationship between individuals, countries, events, the intensity of these links, channels of information transmission, and changes in links over time and space.

4. The analysis of the structure of the information flow is aimed at identifying the type structure of documents (changes in the relationship between different types and types of documents), as well as facts, methods, and concepts, which makes it possible to study the stages of development of a particular area.

Today, the use of modern OSINT tools and technologies outside the subject area of special services is carried out for such tasks as checking counterparties, job candidates, competitive intelligence and business security, using the original meaning of the term “intelligence” (to examine, investigate, study something for a specific purpose), free from semantic shades depending on the scope of use (Official website of Sidcon Consulting Company, 2023).

Consolidated information. For the first time, the concept of “consolidated information” came into scientific and practical use from the title of the UNESCO Symposium on Information and Consolidation (Colombo, Sri Lanka, 12-15 September 1978). A detailed definition was proposed by T. Saratsevych (1986) in his book “Information Consolidation. A Guide to the Evaluation, Restructuring and Repackaging of Scientific and Technical Information”.

Consolidated information is open knowledge that has been specially selected, analysed, evaluated and possibly restructured and reformatted to serve the urgent decisions, problems and information needs of consumers or a social group that otherwise cannot access this knowledge effectively and efficiently because it is not readily available in its original form and is spread across many documents. The criteria for selecting, evaluating, restructuring and repackaging this knowledge are determined by potential consumers.

In the national terminology of information activity, the concept of “consolidated information”, which appeared in the early 1990s, was perceived as a designation of a promising set of methods of scientific and information activity.

DSTU 5034:2008 (2009) provides the following definition: Consolidated information is information that is selected from dispersed and/or hard-to-reach information sources, analysed, evaluated, structured (if necessary), and modified to be used for direct problem solving or meeting information needs.

The main processes related to information consolidation are listed below (Saratsevych, 1986):

- studying potential users to determine the criteria for all other processes;
- selection of information sources that potentially contain the most useful information for solving certain problems and information needs of the user; selection can be made from a variety of primary and secondary sources;
- assessment of information in terms of its quality, reliability and validity;
- analysis to identify and highlight the most prominent characteristics;
- restructuring (if necessary) the identified information into content that can be used by users in the most efficient and effective way; this may include synthesis, summarisation, rewriting, simplification, revision, modern presentation, etc;
- packaging/repackaging of the restructured information into a form that will increase the potential for its use (restructuring refers to the content or essence of information, while packaging deals with the means, format and form of its presentation);
- disseminating information in a way that encourages and facilitates its use;
- user feedback, assessment of efforts, adjustments.

Comparison of the OSINT intelligence cycle, as set out in the US National Intelligence Report (2011), and the content of the information consolidation process, as described in the manual “Information Consolidation Course: A Guide to Training and Education in Information Analysis, Synthesis and Repackaging” (Saratsevych, 1986), shows their actual identity, which is obvious, given that both concepts represent information and analytical activities in their essential components. The difference lies in the fact that the content of the concept of “consolidated information” does not indicate a specific area, while OSINT, having emerged from the sphere of intelligence activities, still retains the relevant connotations in the application of this term.

Without further searching for analogies, terminological correspondences, methods and methodological approaches, we note that the terms “OSINT” and “consolidated information” used in the field of information and analytical activities are actually synonymous.

The scientific novelty lies in the identification of analogies between the terms “OSINT” and “consolidated information”, which form a terminological series in the scientific discourse and practical sphere of information and analytical activities.

The above considerations of the relationship and correlation between the terms “OSINT” and “consolidated information” in the context of information and analytical activities allow us to draw the following conclusions:

1. The terminological field in the scientific discourse and in the field of practical information and analytical activities is characterised by the formation of a synonymous series, which includes the terms “OSINT” and “consolidated information”, which are actually designations of the concept of “information and analytical activities”.

2. An analysis of the content of these terms, as set out in the policy documents that initiated and develop their use, shows that the difference lies in the fact that the content of the concept of "consolidated information" does not indicate a specific field of activity, while OSINT, having emerged from the field of intelligence, retains the relevant connotations in the application of this term in other areas.

OSINT in its meaning, free from semantic shades depending on the scope of use in intelligence activities, is a type of information and analytical activity that is actively developing in the modern information and communication space to perform a wide range of tasks in social practice to search, collect and analyse information from open (publicly available) sources that do not have classification or access restrictions.

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