goal through mutual benefit. People co-operated and coordinated their actions on the basis of common interests, traditions and customs, which helped to coordinate actions and establish rules of interaction between people. The first languages appeared, in which people could express their thoughts and transmit these thoughts to other people. People began to organise themselves into groups, thanks to which they became stronger among other groups of people and nature in general. In each group, socalled leaders were formed, usually distinguished among other people by their physical and mental abilities. Thus a form of people management appeared — power, with the help of which one person could organise the work of other people. This form of people management has evolved a lot since then.

Today, people manage not just people, but the environment in which they exist: resources, relationships, knowledge, etc. Whereas in ancient times the question of survival was of primary importance to humans, today the main question is how to properly accumulate, organise, use and transfer knowledge from one person to another and from one generation to another generation of people. This question is also related to the question of human survival. If we, people, do not or cannot develop, i.e. accumulate and multiply the knowledge that we have, how will we be able to solve those constantly emerging problems that any person or society faces, how will we be able to build a future in which every person will be happy and will be able to get what he or she wants. Even today, questions about the future of humanity remain a priority and open for discussion.

B. Organisation and consistency of collective activities through standardisation and legal regulations

For a long time of human and social existence, people have invented and realised quite a large number of forms by means of which they can communicate with each other, achieve goals by reaching common understanding and agreement, solve problems, relying on common sources of knowledge that have passed through time. The issue of organising common activities between people remains the most important. It is the coordinated collective activity of people that contributes to the rapid flow of the creative process, which allows to solve problems faster.

Compared to primitive society, the level of organisation is much higher nowadays. Nowadays, people use a great variety of methods and tools to organise and coordinate their activities:

- organisational structures are established within businesses, organisations and public institutions that define the hierarchy, roles and functions of employees;
- technologies such as e-mail, messengers, video conferencing, project management systems and others are used to exchange information, coordinate actions between people;
- all rules of behaviour and processes within communities are standardised to improve efficiency and ensure the quality of their products or services.

It can be seen that the degree of the consistency of actions is also much higher compared to earlier stages of human development.

Regulations and standards were the first to address the problem of collecting and systematising knowledge, as they represent formalised norms and rules that regulate the behaviour of people and organisations in society. The introduction of regulations and standards helps to create a unified and ordered approach to knowledge organisation and provides a common basis for information exchange.

Regulations and standards enable:

- to ensure unity, accuracy and reliability of information;
- to organise knowledge, i.e. classify and structure information;
- to protect people's rights and interests.

Regulations and standards are documents that establish rules, norms and requirements in a particular area (e.g. product quality standards, building codes, safety regulations, etc.). They are aimed at ensuring uniformity, quality and safety in different areas of activity. The task of any standard in general is to describe a consistent system of concepts (and corresponding terms), business processes, rules and other regularities, ways of solving certain classes of tasks etc.

However, they cannot completely solve all existing problems because:

- Knowledge is constantly evolving and changing, making regulations and standards quickly outdated or unable to adequately reflect new knowledge.
- The process of adding new knowledge is too resource-intensive because adding new knowledge requires searching for similar existing knowledge and manually integrating that knowledge with existing knowledge.
- Modern normative legal acts and standards describe only rather narrowly specialised knowledge, when the rest of knowledge is not standardised in any way. That is, the question of interdisciplinary organisation of knowledge remains open.
- The most urgent problem remains the problem related not to the form, but to the essence (semantics) of standards - the problem of inconsistency of systems of concepts and terms between different standards, which is relevant even for standards within the same field of activity.

C. Use of common encyclopaedias in organising and coordinating collective activities

In addition to regulations and standards, there are encyclopaedias [9] and dictionaries that cover knowledge from different subject domains and are interdisciplinary

[10]. Encyclopaedias and dictionaries are designed to integrate information related to a common topic.

Encyclopaedias are reference publications that contain information on a wide range of topics and subjects. They are intended for general familiarisation with different fields of knowledge and may contain general information, historical facts, descriptions of phenomena, etc. The purpose of any encyclopaedia is to collect knowledge scattered across disciplines and bring it into a system understandable to the individual.

While regulations and standards cannot always provide complete information or cover all aspects of a particular topic, encyclopaedias can be useful to provide a broader context or additional information on a given topic. Today, regulations, standards and encyclopaedias complement each other, but are also used for different purposes.

D. Digitalisation of information for simplifying and accelerating the organisation and consistency of collective action

With the development of technology, it has become much easier to describe and popularise knowledge by creating topic-based websites. One of the representatives of this kind of knowledge repository is mathprofi — a site that is a resource describing all topics of school and higher mathematics. There is a large number of such online resources on any topic and subject. In them, information is presented and described in an understandable and accessible form for any untrained reader.

In parallel with the development of sites like mathprofi, there occurred an idea of creating a common repository that brings together all the knowledge of mankind, categorised by topic, and to which any person can add new information.

The most widely used computer encyclopaedia at present is Wikipedia — a publicly available multilingual universal Internet encyclopaedia with free content. Its main advantages are its multilingualism and the possibility for users to add and adjust its content.

Traditional wikis based on this approach have a number of disadvantages, including a lack of content consistency, that is, the lack of uniformity in the presentation and formalisation of this content. In wikis, due to frequent duplication of data, the same information may be contained on several different pages. When this information is changed on one wiki page, users must ensure that the data is also updated on all other pages.

Another disadvantage is the difficulty of accessing the knowledge available on wikis. Large wikis contain thousands of pages. Performing complex search queries and comparing information from different pages in traditional wiki systems is a time-consuming task. Traditional wikis use flat classification systems (tags), or classifiers organised into taxonomies. The inability to use typified properties generates a huge number of tags or categories [9].

Open databases and knowledge bases are promising tools for building and retrieving knowledge. Semantic Web-based open databases and knowledge bases [11] are resources that use Semantic Web principles and technologies to represent and organise data and knowledge in a structured and semantic form [12]. The Semantic Web is an extension of the World Wide Web in which information has semantic meaning that allows computers to understand and process data efficiently and accurately. Examples of such Semantic Web-based databases and knowledge bases are:

- DBpedia — one of the best known Semantic Web projects. It extracts structured data from Wikipedia and presents it in RDF format. DBpedia contains an extensive set of knowledge, including information about people, places, organisations, scientific articles and more.
- Linked Open Data (LOD) is an initiative that aggregates and provides access to open data in RDF format from a variety of sources. LOD brings together data from fields such as geography, biology, culture, economics and others, and makes it possible to share and analyse these data
- Wikidata is an open knowledge base developed by the Wikimedia Foundation. It contains structured data about various entities, including people, places, books, films, scientific terms, and more. Wikidata uses the RDF language to represent the data and provides an API to access this data.
- Cyc — a project to create an ontological knowledge base that allows computer systems to solve complex Artificial Intelligence problems based on logical inference.
- GeoNames — a geographic database that contains information about places from all over the world. It provides data on geographic coordinates, population, administrative units, geographic objects, and other information. GeoNames uses Semantic Web standards such
- MusicBrainz — an open source music database that contains information about music artists, albums, tracks and other music-related entities. It uses Semantic Web technologies to organise and represent data, and provides an API to access this data.

The listed databases and knowledge bases also do not solve all the problems that modern Wikipedia has.

Unfortunately, modern traditions of presentation of various kinds of documentation, standards, reports, scientific and technical articles and monographs are not only not oriented to their adequate understanding by intelligent computer systems, but also do not contribute to their quick understanding by those people to whom these texts are addressed. The latter circumstance requires the development (writing) of textbooks and teaching aids

specially designed for those people who are beginning to master the relevant field of knowledge, who have not yet acquired the necessary qualifications. But it is obvious that this implies a significant duplication of the information presented.

E. Shortcomings of current solutions to ensure consistency and compatibility of different activities

All the tools considered for representing, structuring and accumulating information make it possible to simplify the organisation and coordination of collective activities, but do not allow to solve these tasks in a comprehensive way, because:

- The increase in the number of reference materials presenting and describing the same information in different forms leads to an increase in duplication and, consequently, inconsistency of this information.
- There is quite a lot of information in existing information resources that is characterised by inaccuracy, unstructured, incomplete, incoherent and unreliable information.
- Information becomes obsolete rather quickly, i.e. becomes irrelevant and unclaimed due to finding new methods of solving existing problems. All irrelevant information is quickly accumulated in the Internet space. That is why there is a lot of so-called "junk information" in Internet resources, which is this irrelevant and unclaimed information.
- The input of information in information resources is done by intermediaries - people who do not have the necessary competence to modernise and disseminate this information, which directly affects the quality of all information. This is also due to the fact that a person who receives information from one source interprets and transmits it to another source in his or her own way. Different people describe concepts from different sources by synonymous terms, which leads to the loss of the original meaning of these concepts. Thus, new contradictions in information appear.
- Working with huge amounts of information implies working with several sources of this information. In such sources it is difficult to search for necessary (relevant) information, as there is a huge number of different categories, which implies the use of complex search operations.
- This, in turn, is related to the language of knowledge representation. The format of knowledge representation and description in reference materials is understandable only to a human being and cannot be processed by a computer system, and as a consequence, cannot be used for solving problems by a computer.
- Knowledge is most often structured in the form of books, encyclopaedias, dictionaries and reference books on specific subject domains, which allows one to learn a particular subject domain quickly. However, this makes it difficult to understand information at the "junctions" of subject domains, so that a person is not well-versed in interdisciplinary knowledge. The so-called "mosaicism" of perception is formed in a human being, as a human being during training and work gets used to artificial division of knowledge areas and has difficulties in solving problems at "junctions".
- To integrate information from different sources, algorithms for matching and merging data, identifying and resolving duplicates, and algorithms for converting to common presentation formats are used, but even these algorithms do not completely eliminate inconsistencies and duplication of existing information.
- The existing information resources do not standardise and do not apply general principles of presenting information for a wide range of readers. Each reader perceives information in his/her own way, and consequently, there are differences in the understanding of the same information.
- The popularisation of knowledge is carried out with the help of specialised Internet resources that not only simplify but also distort the presentation of information for professionally untrained readers. The increase in the number of such Internet resources contributes to the duplication of information and the development of contradictions in it.

To solve these problems, methods and technologies must be utilised which can:

- present any information in the same same form;
- integrate integrate information from different information sources;
- describe and structure structure information both from one subject domain and information at "junctions" between subject domains;
- standardise standardise the description and visualisation of various types of information;
- re-use re-use existing knowledge and accumulate new knowledge;
- present information in a form that is understandable to both (!) humans and computers;
- develop tools to quickly find quickly find the information you need;
- create a personalised personalised experience for any user;
- develop methods and tools to improve these methods and technologies.

In other words, it is necessary to create such unified integrated information resources, with the help of which it is possible to quickly obtain existing information and to integrate new information and it would be easy to coordinate various activities, including activities on the development of intelligent systems. It is also necessary