#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

# INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION: PRACTICE

Recommended by the Methodical Council of Igor Sikorsky Kyiv Polytechnic

Institute as a textbook for foreign students studying in the specialty

051 «Economy»

Kyiv

2021

Reviewer Kopishynska Kateryna, candidate of economics. Associate

Professor. National Technical University of Ukraine "Igor

Sikorsky Kyiv Polytechnic Institute"

**Responsible** Voitko Sergii, Head of the Department of International editor Economics, Professor, Doctor of Sciences (Economics),

Professor. National Technical University of Ukraine "Igor

Sikorsky Kyiv Polytechnic Institute"

The Grief is provided by the Methodical Council of Igor Sikorsky Kyiv Polytechnic Institute (protocol number 2 from 09.12. 2021 year) on submission of the Academic Council of the Faculty of Management and Marketing (protocol №3 from 25.10. 2021).

Electronic network educational edition

Vorzhakova Yuliia Petrivna, PhD, senior lecturer

Redko Kateryna Yuriivna, PhD, Associate Professor

International scientific and technical cooperation: practice

International scientific and technical cooperation: practice [Electronic Resource]: Teaching manual for the students Specialty 051 "Economics" / Yu.P. Vorzhakova K. Yu. Redko; Igor Sikorsky Kyiv Polytechnic Institute - Electronic text data (1 file: 76 KB). – Kyiv: Igor Sikorsky Kyiv Polytechnic Institute, 2021. - 51 p.

The teaching manual is devoted to the following topics: Subject matter, methods and system of International scientific and technical cooperation. Creation of international coordination programs, joint scientific and technical research. International licensing, exchange of scientific and technical documents, patents, licenses. International engineering. Cooperation in the training of scientific and engineering personnel. Holding international scientific and technical conferences, symposia. Establishment and functioning of international research institutes and organizations. Development of scientific and technical forecasts. Priority directions of MNTS development. For students, graduate students and other stakeholders.

© Yu.P. Vorzhakova, K. Yu. Redko, 2021

© Igor Sikorsky Kyiv Polytechnic Institute, 2021

#### **CONTENTS**

TOPIC 1. Subject matter, methods and system of international scientific and
technical cooperation5
TOPIC 2. International scientific and technical relations. creation of international
coordination programs, joint scientific and technical research9
TOPIC 3. International licensing, exchange of scientific and technical documents,
patents, licenses
TOPIC 4. International engineering
TOPIC 5. Cooperation in the training of scientific and engineering personnel 21
TOPIC 6. Holding international scientific and technical conferences, symposia 27
TOPIC 7. Establishment and functioning of international research institutes and
organizations
TOPIC 8. Development of scientific and technical forecasts
Control questions to determine students' level of learning
An example of questions in the scorecard
References

## Topic 1. Subject matter, methods and system of International scientific and technical cooperation

#### Questions raised on self-study:

- 1. International scientific and technical relations.
- 2. International research and production associations.
- 3. International technology transfer.
- 4. The main forms of technology transfer.
- 5. Coordination international programs.
- 6. International production cooperation.
- 7. General international cooperation.

#### Questions for self-control:

- 1. What is the main goal of the priority areas of INTS development?
- 2. What is not the subject (object) of intellectual property?
- 3. What are the characteristics of INTS?
- 4. What are the features of international scientific and technical cooperation, its subject matter and concepts?
  - 5. What are the theories of international cooperation?
- 6. What are the main elements of the system of international scientific and technical relations?

#### *Topics of the essay:*

- 1. The subject of international scientific and technical cooperation.
- 2. Methods of international scientific and technical cooperation.
- 3. The system of international scientific and technical cooperation.

#### Task 1

#### Case 1

#### Time-Money

A Polish delegation from the Trade Union visited India. In honor of the arrival of the delegation, the Indian side scheduled a reception. The reception program

included a welcome meeting for the guest of honor - a prominent Indian parliamentarian and dinner. In the invitations, the reception time was marked as 19:00.

Arriving at the reception at 18:45, the Polish delegation found in the hall only the servants finishing the table setting. Indian participants of the reception began to arrive in half an hour. At 19:45 the guest of honor arrived. At 20:00 the reception began.

A responsible employee of the Polish embassy, who arrived at the reception at 7.30 pm, reassured the members of the delegation. "This is not a sign of disrespect to you.

#### Task 2

#### Case 2

Mr. Byrd, a former U.S. State Department employee, was hired by a well-known multinational corporation as a representative in Saudi Arabia.

The former American diplomat was invited to Mr. Faud's house to discuss his possible participation in a local joint venture with the corporation.

They were introduced to each other, and since this was their first meeting, the conversation began with an informal conversation. Questions were common, such as, "How are you? How did they get there? How is the family? How are your parents? » And so on.

Mr. Byrd, familiar with the accepted formalities of greetings and dating, answered the question: "Thank you, good ... My father is fine, but, unfortunately, became worse to hear ... I saw him a few months ago, on Christmas, when we took him for a couple of days from the nursing home ... »

From that moment on, something went wrong ... Mr. Faud was quite hospitable and polite, but showed no interest in doing business with an American colleague.

#### Task 3

#### Case "Tangled Trace of Liability for Oil Tanker Disaster"

The crash of the Prestige tanker (owned by one country, administered administratively to another country and chartered by companies from around the world) has resumed controversy over the inspection of ships and the application of laws governing the carriage of goods by sea.

When a worn-out tanker is registered in the Bahamas, owned by a Liberian company, subordinate to a Greek maritime administration, chartered by a Russian oil company based in Switzerland, and operated by a captain, an Asian crew, who is ultimately responsible for the economy, caused by the spill? An old single-hull Prestige tanker with a load of 70,000 tons of fuel oil split in half and sank off Spain's northern coast. This disaster has ignited heated debate over the problem of checking the technical condition of cargo-carrying ships, as well as the problem of the application of international laws governing maritime transport.

The tanker, launched 26 years ago, was punctured during a storm and started sinking, spilling oil into the sea. The spillage of 10,000 tons of this extremely toxic cargo created a 130-kilometer spot of oil, resulting in the contamination of mostly rich fisheries in the Galicia region. More than 1,000 anglers lost their jobs, birds became covered with a layer of fuel oil, and lobsters died in the bays. In the North Atlantic, the sea traffic is very lively, and the disaster of the Prestige tanker is not the first case that led to the spill of oil off the northeast coast of Spain. France has also been affected by environmental disasters caused by cargo ship crashes.

Following the crash of the Prestige tanker, French President Jacques Chirac has called for draconian measures to ensure the safety of maritime traffic and protect the shores of European countries from the threat of environmental disasters.

In 1999, an Erika tanker sank off the coast of Brittany, resulting in the spillage of 15,000 tons of fuel oil and the pollution of 400 km of the coast. After the crash of the tanker, France applied to the European Union to set up an organization to guarantee the safety of maritime transport, but the case was bogged down in discussions about where the headquarters of such an organization should be located.

Jose Maria Aznar, who was Spain's prime minister at the time, threatened to litigate to offset the cost of environmental pollution from petroleum products.

However, whom could the Prime Minister sue for? Lawyers say it has become especially difficult lately to apply international maritime law because companies and ship-owners are trying to reduce their costs by registering their vessels in so-called "extra shelters" (low tax countries) and by hiring cheap ones, but in many cases crews are poorly trained. The Prestige tanker was no exception. It was incorporated in the Bahamas, was owned by the Liberian company Mare Shipping, subordinated administratively to the Greek company Universe Maritime and was chartered by the Russian trading company Crown Resources, which is incorporated in Switzerland. Politics is also an obstacle to solving this problem.

Following the crash of the Prestige tanker, the Spanish government jumped at the fact that the tanker was heading to the British colony of Gibraltar, to which Spans did not make any territorial claims. Spain is trying to accuse the UK of failing to comply with EU directives to check the technical condition of ships. Loyola de Palacio, a Spanish citizen and EU commissioner for transport and energy, went further, accusing Gibraltar of what happened to the Prestige tanker.

According to Mr Palacio, Gibraltar does not prohibit the entry and unloading of potentially dangerous single-hull tankers, allowing Gibraltarians to cash in on the service of vessels that cannot enter European ports.

The British government has declared Spain's accusations void of all reason. In a letter to the European Commission, which was published but in the Financial Times, Sir Nigel Sheinwald, the Permanent Representative of the United Kingdom to the EU, states that the Prestige tanker did not go so far in Gibraltar during his last dramatic trip. "The last time a tanker stopped at a refueling station in Gibraltar without even entering the port was in June 2003," the letter said.

The decision as to who should bear the costs of eliminating the consequences of the catastrophe should be made in accordance with the Convention on Civil Liability Convention, adopted by the International Maritime Organization (International Maritime Organization). According to this convention, the ship-owner

is obliged to compensate for the damage caused by the oil leakage from the tanker, but this damage was only estimated at \$ 80 million.

According to the findings of InterTAN, the Association of Independent Tanker Owners, in 95% of the compensation provided by the civil legal liability, sufficient to finance the contamination of contaminated sites. In cases where this compensation is insufficient, the International Oil Pollution Compensation Fund, funded by the recipient of the oil, will take effect. The maximum total compensation from the two organizations is \$ 180 million. After the crash of the Prestige tanker, attention was also paid to checking the technical condition of the worn-out vessels.

The European Commission has called on the governments of Europe as soon as possible to put in place new rules of verification. In accordance with these rules, the port authorities should inspect at least 25% of all ships calling at the docks, and first, should check for worn single hull vessels.

#### Case questions:

- 1. What are the main ethical issues with the Prestige tanker?
- 2. What are the main issues of social responsibility in the case of the Prestige tanker?
- 3. Which of the parties to this conflict, in your opinion, should bear the greatest and least responsibility before the law for the oil spill?
- 4. Not taking into account the political aspects of the problem, what measures could be taken to avoid such problems in the future?

## Topic 2. INTERNATIONAL SCIENTIFIC AND TECHNICAL RELATIONS. CREATION OF INTERNATIONAL COORDINATION PROGRAMS, JOINT SCIENTIFIC AND TECHNICAL RESEARCH

#### Questions raised on self-study:

- 1. What is the main goal of the priority areas of INTS development?
- 2. What is not the subject (object) of intellectual property?
- 3. What are the main types of licensing agreements?

4. What is prepayment outside included value?

Questions for self-control:

- 1. Identify the features of the current stage of international development organizations.
- 2. Define an international organization taking into account narrowed and extended approaches.
  - 3. Name the reasons for the creation of international organizations.
  - 4. Name the goals and objectives of international organizations.
- 5. Name the criteria, the corresponding types and give examples of international organizations.

*Topics of the essay:* 

- 1. Joint research.
- 2. Joint development and use of scientific and technical norms and standards.
- 3. Exchange of results of scientific works.
- 4. Conducting joint research (ND, DKR).
- 5. Introduction and use of joint scientific and technical programs.

#### Task 1

#### Case "Pharmaceutical firm"

A large German pharmaceutical company, well known in the European market for its products. Assessing its potential in the CIS market, the company's management concluded that by 2019 it should be ready for a significant increase in turnover, as in addition to the distribution of goods in Ukraine, Belarus and Moldova is expected to demand for drugs in Kazakhstan, Uzbekistan and Tajikistan.

As a result, the company's management is in the process of developing its strategy for the coming years. The company now keeps its goods in a warehouse in Kyiv, which sharply increases costs due to high prices for related services. The company, receiving an order for a small batch of goods, sent the goods to the customer at his expense. However, due to the changing situation, the expansion of the geography of deliveries, the increase in consignments and the expansion of the

range, the company's management seeks to compile customer requirements with minimizing its own costs and increasing profits per unit of goods sold.

The company must analyze the situation according to all criteria and make an optimal decision based on the results of studying the following factors:

1. Development of production.

Should the company organize the production of goods in the CIS countries? If so, determine the best option for its location.

2. Inventory planning, warehousing, storage of goods.

Should companies keep their goods in the required quantity in the established regional distribution centers? If so, how will this affect the price of the product (whether to include sales costs, thereby reducing own profits, or increase the price of drugs).

Should companies build their own warehouses with the option of creating permanent stocks of drugs or rent local structures?

3. Choice of delivery base, processing of transport conditions of the contract.

On what basic terms should sales contracts be concluded? This means making decisions on the following main problems related to transportation:

- a) selection of the delivery condition of Incoterms;
- b) what costs for different versions of the goods are included in the price of the goods fixed in the contract;
- c) who, the firm-seller or buyer, and until what point is responsible for the consequences of accidental death or damage to the goods during delivery.

At any basis of delivery the pharmaceutical firm should develop transport conditions of the trade agreement which will allow to coordinate all stages and functional areas of delivery (transportation, forwarding, customs registration, storage in transport knots, etc.).

#### 4. Legal environment

Identify the conditions and prospects for the development of legislation in the countries where the company plans to operate on the activities of foreign companies in their territory.

#### 5. Administrative costs

Should regional offices be established, if so, who will manage them (foreign or national management), determine the availability of qualified staff.

#### Task 2

#### Case of Globalization and European Manufacturers of Household Goods

In the 80's and 90's there was a significant globalization of the world economy. However, not all sectors of the economy were equally involved in the globalization process. In the industrial sector of the European economy, some industries, such as mechanical engineering, remain an industry consisting of a large number of different sized companies. The service sector also has a large number of national features.

The question is globalization necessarily affecting all industries, how should companies respond to such an impact, do companies need to maintain national strategies or develop global ones? The study, which was carried out on the example of the European consumer goods industry, will help answer some questions. Researchers have divided all manufacturers in the market of household goods into three groups:

- 1. National players (production facilities are in their country, 90% of products are sold locally).
- 2. Exporters (production facilities are located in their home country, but more than 30% of production is sold in foreign markets). Such companies include Bosch-Siemens, AEG, Merloni.
- 3. Global players (companies that produce and sell products in different countries Electrolux, Philips, Whirlpool).

Consumer behavior in different European countries is different. For example, the French prefer washing machines with a vertical load, and the British with front, the Germans choose machines with high spin speeds, and Italians with low. Creating a single European market contributes to the formation of a single "pan-European" lifestyle. The unification of technical requirements and standards allows

manufacturers to achieve greater standardization of goods, which in turn contributes to the formation of more homogeneous tastes and requirements of consumers.

Its players represent retail in different European countries, but the creation of a single market leads to the consolidation of retail companies, their increase. Because of a series of mergers or the formation of strategic alliances, pan-European retail networks are being formed. This allows them to not only buy products from manufacturers around the world, but also to significantly optimize stocks, improve customer service. Modern flexible manufacturing technologies allow companies to produce different product models on the same basic platform that meet local preferences without significantly increasing production costs. Changes in the competitive environment of the industry (concentration or international mergers of companies, the need for more sophisticated information on the state of the market, changes in technology and production management) have led to the need to prioritize the companies of this industry global or at least regional (for example, pan-European) strategies. Researchers believe that in the future, the industry will be controlled by five or six giants, and all small and medium-sized companies will be associated with them in one way or another - licensing agreements, franchises, joint ventures, strategic alliances, etc.

#### Case questions:

- 1. Considering the general situation in the industry, make a development forecast for the three groups of companies that have been in the situation.
- 2. How do the integration and consolidation processes affect the different types of companies represented in the industry?

## Topic 3. INTERNATIONAL LICENSING, EXCHANGE OF SCIENTIFIC AND TECHNICAL DOCUMENTS, PATENTS, LICENSES.

Questions raised on self-study:

- 1. International licensing operations.
- 2. Patent license.

- 3. International licensing transactions.
- 4. Types of license fees for granting license rights to use the invention
- 5. Royalties.
- 6. Lump sum payment and the combined payment.
- 7. Know-how transfer agreements.
- 8. Objects of international licensing.

Questions for self-control:

- 1. What is the importance of the International licensing operations?
- 2. What do the special principles of the cross-licensing?
- 3. What is the principle of prepayment?
- 5. What is the difference between the principle of the lump sum payment and the principle of the royalties?
  - 6. What is the average period of validity of the patent?

*Topics of the essay:* 

- 1. International licensing operations;
- 2. Patent license;
- 3. International licensing transactions;
- 4. Types of license fees for granting license rights to use the invention;
- 5. Royalties.

#### Task 1

#### Case

Amazon is an American, the world's largest company, one of the first Internet services focused on the sale of real goods in mass demand, selling goods and services over the Internet. Since 2012, works have been used in warehouses and freight centers, the level of which cannot be innovated by competitors.

Automated giant "hands", huge "washers" that move packed boxes of goods and put them in appropriate containers; all this together - a robotic complex Kiva. Back in 2012, Amazon snatched this development from a cohort of technology startups and paid \$ 775 million for a legion of robots that are now working for the continued growth of Jeff Bezos' empire. He canceled deliveries of robotics to other

Kiva customers, regardless of the field of application (although the main direction is still warehousing, services and retail). Once the deals in effect at the time of Kiva's acquisition were over, the companies had to look for other solutions. The problem was that there were no other similar solutions on the market. Demand is driving supply, and in the 4 years since Kiva disappeared from the common market, new solutions have emerged (especially since Amazon's experience has proven the effectiveness of robotics at the same time as human labor in warehouses). New works look different and specialize mainly in each on a separate type of work. This is partly due to restrictions on the use of Kiva's patented technologies, partly due to the desire of developers to release the finished product as soon as possible, even with fewer features.

Amazon uses approximately 30,000 Kiva robots at its wholesale bases and warehouses around the world. Dave Clark, vice president of international operations, shares an assessment of the benefits of technological progress: the introduction of robots has reduced operating costs by 20%.

Deutsche Bank analysts estimate that robotics in each warehouse saves \$ 22 million from the total cost of finishing and maintenance of the facility. The transition to the use of Kiva technology in hundreds of facilities will save Amazon more than \$ 2.5 billion. "To succeed in e-commerce needs to invent truly innovative algorithms for each warehouse. Today, with the development of technology, ingenuity is focused on "smart" automation of this industry "- says Karl Siebrecht (Karl Siebrecht), CEO of Flexe, which positions itself as an analogue

Airbnb shared rental service for warehouses. At one time, Amazon was the first company to combine the delivery of a wide variety of goods with a single shipment, saving time and money for the customer. And today the main advantage of Amazon is the use of Kiva robotics. The closest competitors in the retail industry, including the Walmart, Macy's and Target chain stores, have yet to fill their databases with automated equipment. These companies still use only the work of living packers. Success Amazon has prepared a new generation of customers for robot developers - these are logistics companies that are constantly working with the

bases of loading and unloading of goods, warehouses and more. The "arms race" has begun, with more and more developers joining them - even some former Kiva employees.

According to the US Bureau of Employment Statistics, the number of employees in warehouses was 856 thousand with an average salary of \$ 12 / hour. If part of the work with cargo begins to perform work - the number of people employed in the industry will decrease, but the size of their salary will increase, especially in regions closer to large cities. This forecast is voiced by David Egan, a specialist in industrial real estate market research at CBRE Group. One of the inconspicuous, at first glance, but very significant aspects of savings - the ability to reduce the size of the parking lot of each warehouse and leisure facilities for workers.

Automation should not be taken as a clear negative phenomenon for employment. In fact, work is not so much a substitute as a change in the nature of work. Each machine needs an operator for overall process control, so employees will master robotics management. In addition, during the pre-holiday peak orders make it easier and faster to hire temporary workers than to install additional automated mechanisms. All of these trends are forcing delivery companies to innovate. Because no one dares to repeat a large-scale reorganization according to Jeff Bezos, companies are experimenting with certain areas of work.

Raj Kumar of the consulting firm AT Kearney talks about the experience of Walmart, which began using automation to deliver certain categories of goods from the online store. In addition, according to a market reviewer, Walmart is now implementing drones - but not for package delivery, but for inventory. The devices are used in warehouses and videotape all items on the shelves. Struggle with Amazon for progress "Modern warehouse is becoming a very high-tech place. Because the only way to increase benefits is to automate processes "- this is the position of the founder of Locus

Robotics Bruce Welty (Bruce Welty) and offers to equip warehouses with its development. The peculiarity of their technology is that it does not displace human labor, but coexists quite comfortably with employees. Locus is a branch of Quiet

Logistics, which has two warehouses in Massachusetts, responsible for delivering goods from online stores to all northeastern direction of the United States. Welty and its colleagues have developed this product delivery service based on Kiva algorithms. They developed software to increase efficiency and successfully implemented it by servicing Zara, Gilt and Bonobos stores. Then Amazon came along and claimed its absolute rights to all Kiva technology. Welty recalls that he once joked about a terribly unfavorable development for all developers of warehousing technologies, if the largest online retailer buys Kiva's patents. However, at the time, Welty believed that Bezos would sell technology at a much higher price - who would have thought that an entrepreneur would simply block competitors' access to robots. In early 2014, the company Quiet Logistics decided to develop robotics on their own. Welty assembled a team of experienced engineers and robotics engineers who introduced the first prototype in less than a year. In two years, Welty started a separate company that raised \$ 8 million from venture funds. So far, Locus robots can be found only in the corridors of the warehouses of the parent company Quiet Logistics. However, the developers agreed with three large companies to implement pilot projects by the end of 2016. In 2017

Welty has increased the number of warehouses to 12, which are serviced by his equipment.

The robot from Locus has a more compact size than the "washers" Kiva have, and is equipped with a touch screen on a stand, which provides a convenient interaction of the employee with the equipment. The display shows instructions for further action with an automated assistant. One worker can send the robot to the other end of the warehouse without having to move objects independently. Labor is used more efficiently, and the interaction of technology and man does not harm the employment of the latter. The fact that Kiva's developments and patents have become closed to other companies in the industry has contributed to the rapid development of alternative solutions. Welty and his colleagues are convinced that without a technology leader, warehouse automation systems are evolving in a highly competitive environment.

Today, there are several examples of simpler technologies that are already used in logistics companies. Fetch Robotics offers robots that move around the warehouse after the employee and transport all the items that he removes from the shelves. Harvest Automation sells a similar solution.

European companies also actively automate the work on freight bases, but most developments are aimed at moving items around the warehouse. A separate area of development - automatic loading from warehouse shelves on a moving platform. The work must have an extremely developed orientation in space and sensitive "limbs" to move the boxes on the shelves without damaging the product. German company Magazine is testing its own Toru system, and startup 6 River Systems from Boston is testing several new products in a similar direction. Details of the development are not disclosed, but it is known that the project involves former Kiva employees.

Amazon is following the development of competitors' technology: as soon as the productivity of other companies is starting to grow, the online giant is also boosting capacity. Bezos does not disclose all the developments of his technology laboratories, but he has already demonstrated something - automated drones.

It should be noted that experts do not believe in the development of only automated UAVs. Most likely, the company's ambitions reach more serious products - cars and trucks with autonomous control system. Amazon does not make loud statements about its intentions to develop robotics, but such behavior is quite expected. By absorbing Kiva, Bezos also did not announce its dominance in the field of warehouse automation. Analysts learn about the company's plans from "crumbs" of information, one of which is the renaming of Kiva to Amazon Robotics. The renewed enterprise is looking for the head of the direction development of robots to create a new robot management platform - if you believe the text of the vacancy on the LinkedIn network. In the spring of 2016, Amazon held a conference attended by leading robotics experts, as well as management from Intel, Toyota, scientists and engineers from both California and faraway Zurich. All participants undertook not to disclose the details of the event to the media, but among those present was noticed

even Apollo 13 director Ron Howard. Incidentally, Kiva works were used to serve guests. Automation and implementation of smart technologies in warehouses do not yet threaten employees with total unemployment. Even the level of technology of the 2016 model does not allow to completely abandoning the people who control the movement of goods, packing parcels and simply check whether the box with the inscription "Cookbook" actually contains books with recipes. The American company IAM Robotics is testing a robotic system that deftly removes even a compact bottle of pills from the shelf.

However, even here you cannot do without an employee of the company, who makes sure that the device grabs from the shelf exactly what is needed. The only work that automation can completely replace - is the basic movement of goods in bulk.

The average employee in the warehouses of an online store covers about 20 km per shift. Entrepreneurs, most likely, first automate this type of employment to transfer employees to more intellectual work [8].

#### Topic 4. INTERNATIONAL ENGINEERING

Questions raised on self-study:

- 1. Engineering related to the preparation of the production process.
- 2. Types of engineering services.
- 3. Tasks of international engineering.
- 4. Features of engineering as a type of foreign trade operations.
- 5. Reengineering.
- 6. Basic conditions of international agreements on the provision of engineering and technical services.
  - 7. Consulting engineering.

Questions for self-control:

- 1. Who are the subjects of the engineering?
- 2. What is the essence of engineering?

- 3. What are the main types of reengineering?
- 4. What are the different engineering and technical services?
- 5. What is the attractiveness of international engineering for Ukrainian companies?
- 6. What is the appeal of international engineering for Chinese companies? *Topics of the essay:*
- 1. Engineering related to the preparation of the production process;
- 2. Types of engineering services;
- 3. Tasks of international engineering;
- 4. Features of engineering as a type of foreign trade operations;
- 5. Reengineering;
- 6. Consulting engineering.

#### Task 1

#### Case

A Canadian banker described the management style of his Filipino boss as follows.

"During my time at the Royal Bank, I had an extremely intolerant and suspicious boss. As an assistant manager, he had power over all administrative staff, including me. The problem was that, as it turned out, he absolutely did not trust his subordinates.

He kept looking over our shoulders, controlling our work, relationships and punctuality.

Although most employees were outraged by this attitude, the assistant manager was an extremely conscientious manager, believing in what he called the "old style" of management. He was convinced that the workers were lazy by nature. Therefore, he believed that they should be forced to work. As supervisor, he justified the harsh treatment of employees.

He found such behavior unacceptable and degrading. The staff believed that they were mostly trustworthy, and decided that the boss did not seem to respect them,

so they began to treat him in the same way. As a result, an atmosphere of distrust and hostility prevailed at work. This atmosphere influenced the work everyone: employees were less and less willing to work, and the assistant manager was increasingly convinced that employees are lazy and require even more rigor. Fortunately, the manager noticed the situation, and it was resolved after lengthy discussions. Only then did it become clear that we see the situation differently. From the point of view of an assistant manager, he only demonstrated his concern for subordinates and participation in their lives. As he explained, Filipino workers, if not treated in the same way, could to feel abandoned and humiliated. Unfortunately, we were not Filipinos, but Canadians, and we did not react the way they would."

## Topic 5. COOPERATION IN THE TRAINING OF SCIENTIFIC AND ENGINEERING PERSONNEL

Questions raised on self-study:

- 1. Types of cooperation of scientific and technical workers
- 2. Scientific internships
- 3. Scientific business trips
- 4. The ratio of the "integration" regime and the principle of the highest favors.
- 5. Integration of the national research area into the European Research Area.
- 6. Academic mobility (Erasmus).

 $Questions\ for\ self-control:$ 

- 1. What does not apply to the types of cooperation of scientific and technical workers?
- 2. What processes are taking place in the domestic law of states that participate in economic integration?
  - 3. What is global integration?
- 4. What types of funding for research collaboration costs (business trips, internships, etc.) do not exist?

- 5. What is the difference between the subordination method of regulating economic integration and the coordination method?
  - 6. When did the European Economic Area emerge?
  - 7. What are the supranational features of the EU?
- 8. How is the "integration" mode and the most favored-nation mode compared?

#### *Topics of the essay:*

- 1. Types of cooperation of scientific and technical worker.
- 2. Scientific internships.
- 3. Scientific business trips.
- 4. Integration of the national research area into the European Research Area.
- 5. Academic mobility (Erasmus).
- 6. Attending international conferences, congresses, symposia.

#### Task 1

#### State support of international scientific and scientific-technical cooperation

- 1. The state creates the necessary legal and economic conditions for the implementation of subjects of scientific and scientific-technical activities of free and equal relations with scientific and scientific-technical organizations, foreign legal entities, international scientific organizations, foreign and international scientific societies and associations, if these relations do not contradict the legislation of Ukraine.
- 2. International scientific and scientific-technical cooperation is carried out by:
- 1) conducting joint research, technical and technological developments on the basis of cooperation, joint scientific and technical programs;
  - 2) conducting research and development under joint coordination agreements;
- 3) performance of works provided by the agreement, one of the parties of which is the organization of the foreign state or the international organization;

- 4) conducting joint research and development with international teams of specialists, international institutes and joint ventures, use of ownership of scientific and scientific-technical (applied) results on the basis of agreements between subjects of scientific and scientific-technical activities;
- 5) mutual exchange of scientific and scientific and technical information, use of joint international information funds, data banks;
  - 6) holding international conferences, congresses, symposia;
- 7) mutual exchange of scientific, scientific-technical and scientific-pedagogical staff, students and graduate students, as well as joint training of specialists;
- 8) participation in international scientific programs, in particular in the framework programs of the European Union for research and innovation.
- 3. Subjects of scientific and scientific-technical activity may participate in the implementation of international scientific-technical programs and projects and enter into agreements with foreign organizations and legal entities, participate in the activities of foreign and international scientific societies, associations and unions as their members. , enter into contracts with foreign organizations and legal entities, participate in international symposia and other events in accordance with the legislation of Ukraine.
- 4. The state ensures the integration of the national research area into the European Research Area by implementing its priorities, in particular:
  - 1) increase the efficiency of the national research system;
- 2) optimization of international cooperation to address global challenges facing humanity;
- 3) ensuring participation in framework and joint international programs of the European Union;
- 4) coordination of the strategy of creation of state research infrastructures with the road map of European research infrastructures;
  - 5) creating favorable conditions for the mobility of scientists;
  - 6) ensuring gender equality;

- 7) full exchange, transfer and access to scientific knowledge.
- 5. The central body of executive power, which ensures the formation and implementation of state policy in the field of scientific and scientific-technical activities, determines the procedure for registration of international scientific and technical programs and projects implemented within the framework of international scientific and technical cooperation by Ukrainian scientists, as well as grants. provided in the framework of such cooperation.
- 6. The central body of executive power, which ensures the formation and implementation of state policy in the field of scientific and scientific-technical activities, conducts state registration of international scientific and technical programs and projects implemented within the framework of international scientific and technical cooperation by Ukrainian scientists, as well as grants. provided in the framework of such cooperation.
- 7. Restrictions in the field of international scientific and scientific-technical cooperation shall be established by the legislation of Ukraine.
- 8. Receipts in foreign currency under international technical programs and projects registered in accordance with parts five and six of this Article shall be exempt from mandatory sale on the interbank foreign exchange market of Ukraine.
- 9. Payment of expenses related to the implementation of international technical programs and projects implemented by state scientific institutions and institutions of higher education shall be made in full in the first instance.

The term of transfer of the specified funds by the bodies of the State Treasury Service of Ukraine may not exceed one day from the date of registration of financial obligations of state scientific institutions and institutions of higher education.

#### Task 2

#### Scientific internship

1. Research (scientific and pedagogical) workers, graduate students and doctoral students may be sent by scientific institutions (institutions of higher

education) for scientific internships, including long-term, to other scientific institutions and institutions of higher education, including abroad.

- 2. Referral for scientific internship may take place on the initiative of a scientific (scientific and pedagogical) employee or on the initiative of a scientific institution or institution of higher education.
- 3. The purpose of scientific internship is to increase the level of theoretical and practical training, conducting author's research using modern equipment and technologies, mastering the latest unique methods, gaining experience in research, information exchange and expansion of scientific contacts.
  - 4. The term of scientific internship may not exceed two years.
- 5. An agreement on sending them for scientific internship to another scientific institution, institution of higher education shall be concluded with persons who are sent for scientific internship.
- 6. Financing of expenses related to scientific internship may be carried out at the expense of a scientific institution (institution of higher education) that sends a person for scientific internship, funds provided in the State Budget of Ukraine under the relevant budget program, grants, funds of the party accepts, and other sources not prohibited by law.

The receiving party is considered a scientific institution, another research organization, a higher education institution that has issued an invitation for a scientific internship. The host country may be a non-resident of Ukraine.

- 7. During the scientific internship for a scientific (scientific and pedagogical) employee, graduate student, associate professor, doctoral student, his main place of work or study (training) is retained.
- 8. The period of scientific internship is included in the scientific experience of the scientific and scientific-pedagogical worker.
- 9. Scientific and scientific-pedagogical workers within a month after the completion of the scientific internship shall submit to the scientific institution, the head of the educational institution (scientific institution) that sent them for the

scientific internship, a written report on learning outcomes, internships and tasks approved in the prescribed manner.

According to the decision of the scientific (scientific, scientific-technical, technical) council of a scientific institution or the academic council of a higher education institution, a scientific internship can be equated to advanced training.

The report is subject to approval by the academic council of the higher education institution or by the scientific (scientific, scientific-technical, technical) council of the scientific institution.

10. Regulations on the procedure of scientific internship shall be approved by the Cabinet of Ministers of Ukraine.

#### Task 3

#### Scientific business trip

- 1. By the decision of the management, he scientific (scientific and pedagogical) worker can be sent on a scientific business trip.
- 2. A business trip is a business trip of a scientific (scientific and pedagogical) worker, graduate student, associate professor, doctoral student for a certain period of time for scientific or scientific and pedagogical work, participation in scientific conferences, symposia, seminars, scientific schools, scientific expeditions outside his place. Main work (for graduate students, adjuncts, doctoral students outside the place of study) in the presence of an invitation from the host party, or the direction of the institution in which the scientist works (studies).
- 3. The term of a scientific business trip may not exceed 90 days, except in cases when the business trip is connected with a long-term scientific expedition.
- 4. Financing of expenses related to a scientific business trip may be carried out at the expense of the general and special fund of a scientific institution (institution of higher education) that sends a person on a scientific business trip, funds provided in the State Budget of Ukraine under the relevant budget program, grants, funds of the receiving party and other sources not prohibited by law.

## Topic 6. HOLDING INTERNATIONAL SCIENTIFIC AND TECHNICAL CONFERENCES, SYMPOSIA

#### Questions raised on self-study:

- 1. Scientific conference.
- 2. Conference structure.
- 3. Conference organization.
- 4. Forms of the conference.
- 5. Classification of these (abstracts)
- 6. Thesis structure.
- 7. Algorithm for thesis preparation.

#### Questions for self-control:

- 1. What can be the subject of conference?
- 2. What types of conferences (depending on the area covered) is divided?
- 6. What rules have ISTC been formulated by international conference?
- 7. What international institutions resolve international economic disputes?
- 8. What explains the growing influence of international organizations on the development of the world economy, taking into account the fact that for legal force of most decisions of international organizations optional?
- 9. What kind of flows in the scheme of international business is not used in the second firm?
  - 10. What is the second component of an international institute?

#### *Topics of the essay:*

- 1. Scientific conference.
- 2. Conference organization.
- 3. Forms of the conference.
- 4. These (abstracts) for the conference.
- 5. Classification of these (abstracts), thesis structure.
- 6. Algorithm for thesis preparation.

#### Task 1

In 1994, the Prosecutor General's Office opened a criminal case over the failure of the implementation of an intergovernmental agreement between Ukraine and Uzbekistan on the supply of cotton in exchange for Ukrainian sugar. According to the press center of the Prosecutor General's Office, the main culprit for failure to comply with the agreement is the National Bank of Ukraine (NBU). He failed to comply with the Cabinet of Ministers' decree on payment for the supplied raw materials. This document obliged the NBU to assist the State Committee on Light and Textile Industry in obtaining loans for the payment of sugar. The assistance was not provided, and because of the downtime, the state suffered losses of \$ 3 trillion. Ruble. In an interview with the Kyivskiye Novosti newspaper, NBU First Deputy Chairman of the Board Volodymyr Stelmakh dismissed the charges against the bank. He stated that at the end of 1993, the NBU did not open any new credit lines at all, except for those that provided financing for conversion programs. It was also noted that according to the Ukrainian legislation, the State Committee of Laws did not have the right to take a loan from the NBU. The necessary funds, according to the banker, the Government of Ukraine should have transferred to the Committee for the intended purpose. Does an intergovernmental agreement similar to the one described in this task apply to the fundamental legal principles of international treaty law? What specific provisions of applicable international legal instruments can be used in developing a position to assess the situation described in the task? Which of the mentioned subjects of international and domestic law are responsible for fulfilling the obligations established by the agreement of Ukraine and Uzbekistan? Are the legal facts on the basis of which the Ukrainian prosecutor's office instituted criminal proceedings have international legal significance? Can the case of nonfulfillment by the Ukrainian side of the agreement with Uzbekistan be brought to the international court?

#### Task 2

The space satellite came down from orbit, fell into the territory of state A and caused significant damage. The injured party has claimed damages. The satellite launching state claims that it did not commit any unlawful act, the object was dropped for objective reasons, and therefore its fault was not caused. Is there an offense in the actions of the satellite launching state? What are the features of the emergence and realization of liability for causing harm without fault?

### Topic 7. ESTABLISHMENT AND FUNCTIONING OF INTERNATIONAL RESEARCH INSTITUTES AND ORGANIZATIONS

Questions raised on self-study:

- 1. Formation of organizational and functional structure international organization.
  - 2. Goals of international organizations.
  - 3. Competence of the organization.
  - 4. Functions of international organizations.
  - 5. Classification of bodies of an international organization.

Questions for self-control:

- 1. What is the meaning of the term "the bodies of an international organization"?
  - 2. What concepts of the executive bodies do you know?
  - 3. What kinds of higher (main) bodies do you know of?
  - 4. How are countries classified in international trade?
  - 5. Describe the basic principles of the WTO.
  - 6. What are the main elements of the controlling bodies?
  - 7. Explain the concept of auxiliary bodies.

8. How many countries have signed the general principles of international relations set out in the Final Act of the Conference on Security and Cooperation in Europe?

*Topics of the essay:* 

- 1. The place of international organizations in the system of international business.
  - 2. Tasks and functions of modern international organizations.
- 3. The main stages of emergence and development of international organizations.
  - 4. International Institute.
  - 5. Organizational structures of the term "International Institute".
  - 6. Criteria for international organizations.
  - 7. Typification of modern international organizations.

#### Task 1

#### McDonald's Case in India

McDonald's fast food chain ranks 2nd in the number of restaurants worldwide after the Subway restaurant chain.

The company has more than 33,000 establishments in 120 countries, which serve more than 60 million visitors daily. In many ways, McDonald's Corporation is writing a golden book on global expansion. An average of four new McDonald's restaurants open daily around the world.

One of the last major countries to host McDonald's was India, where the company began opening its restaurants in the late 1990s. Although India is considered a poor country, its large and somewhat prosperous middle class, estimated at 200 million, attracted the attention of McDonald's. India, however, has set McDonald's a unique challenge.

For thousands of years, the Hindu culture of this country has revered cows. Ancient Hindu books claim that a cow is a gift from the gods to human beings. The cow represents the Divine Mother, supporting all people.

Cows give life to bulls on which they plow the land; Cow's milk is highly valued and widely used to make sour cream and butter, cow's urine has a special place in traditional Indian medicine, and cow's manure serves as fuel. About 300 million homeless cows roam the country, revered as sacred animals. They found everywhere: wandering the roads, grazing on lawns, resting in temples. In addition, they are not only found on plates, as Hindus do not eat the meat of these sacred animals.

McDonald's is the world's largest consumer of beef. Since its founding in 1955, countless cows have been killed to produce big macs. How can a company whose well-being is based on the use of beef penetrate a country where eating cow meat is considered a grave sin? Use pork instead of beef? However, 140 million Muslims live in India, and Muslims do not eat pork. Chicken and lamb remain.

McDonald's has responded to this cultural and gastronomic dilemma creation of the Indian version of the bigmak - the so-called Maharaja-Maka ", for cooking which used lamb. Other novelties on the menu that take into account local specifics include "McAlo Tikki Burger", which is made using chicken.

All dishes are clearly divided into vegetarian and non-vegetarian according to the traditions of this country, where many Indians are vegetarians. According to the CEO of McDonald's Indian: "We had to make a lot of inventions to suit local tastes." Indeed, 75% of dishes in McDonald's menus in India are prepared according to national traditions. For a while, it seemed that everything was going well. Then in 2001, McDonald's was literally stunned by a lawsuit filed against him in the United States by three Indian executives living in Seattle.

The executives were vegetarians, and two of them were Hindus.

They accused McDonald's of "intentionally concealing" the presence of beef in French fries! McDonald's claimed that it used only vegetable oil to make fried potatoes, but later admitted that it added a "small" amount of beef extract to the oil. According to the court decision, McDonald's paid a fine of \$ 10 million and brought an official apology that read: "McDonald's sincerely apologizes to Hindus, vegetarians and all its customers for failing to provide the complete information they

need to make an informed choice of food in US restaurants. " In the future, the company has promised to provide more information on the use of ingredients and to find substitutes for beef extract that they add to vegetable oil.

However, in the XXI century in our global news society spread very quickly, and after reports of McDonald's using beef extract in vegetable oil, Indian nationalists took to the streets of Delhi to wreak havoc on a McDonald's restaurant, damaging the company by \$45,000.

They shouted threatening slogans in front of other restaurants, staged pickets near the company's headquarters and demanded that the Prime Minister of India close all McDonald's establishments in the country.

Holders of the McDonald's Indian franchise quickly tried to refute allegations of using beef extract in the vegetable oil, but the extremists began demanding an official laboratory test.

However, the negative feedback received seems to have had little effect on McDonald's long-term work plans in India. The company continued to open restaurants, by 2008, their number had reached 136, and by 2011, it had tripled. When Indians are asked why they go to McDonald's restaurants, they answer that their children like the "American" atmosphere, that the quality of the food is always at a good level, and the toilets are always clean! [4].

## Topic 8. DEVELOPMENT OF SCIENTIFIC AND TECHNICAL FORECASTS

Questions raised on self-study:

- 1. The essence of extrapolation methods
- 2. Construction of an envelope curve based on a family of curves
- 3. Expert assessment methods
- 4. Modeling of processes of technology development

Questions for self-control:

1. What are the components of the extrapolation methods?

- 2. What is part of the regulatory component of the international investment system?
  - 3. What is the subject of expert forecasting methods?
  - 4. What are the main provisions of the expert assessment methods?
- 5. On what principles modeling of processes of technology development is built.

#### *Topics of the essay:*

- 1. The essence of extrapolation methods.
- 2. Construction of an envelope curve based on a family of curves.
- 3. Expert assessment methods.
- 4. Modeling of processes of technology development

#### Task 1

#### Case "European Integration Can Improve Human Development in Ukraine?"

Prospects for further development of human potential in Ukraine will depend on how Ukrainian leaders and authorities at all levels will be able to take full advantage of the opportunities and challenges associated with the implementation of the European integration course. If Kyiv manages to implement European integration plans and take EU requirements as the basis for a framework model of the vital reform process, Ukraine will be on the short track to success and prosperity, with the potential to achieve a significant improvement in living conditions and poverty reduction.

The process of European integration provides a unique opportunity to properly improve the level of human development in the country. This is stated in the new National Human Development Report "Human Development and the European Choice of Ukraine", which was formally presented by Francis M. O'Donnell, UN System Coordinator and UNDP Resident Representative in Ukraine, Grigory NEMYRY, Vice Prime Minister of Ukraine, Ian Boogh, Head of the Delegation of the European Commission to Ukraine and Jerzy OSIATINSKI, International Coordinator of the Team of Authors of the Report. "Since 1995, through its regular

Human Development Reports, the United Nations Development Program in Ukraine has steadily drawn the attention of politicians and the public to the challenges facing the country in social and economic development. National Reports offered a long-term perspective, an analysis of the situation in the country and strategies for enhancing human development.

The purpose of writing these reports is to consolidate data on human development in the country, to influence national policies and to mobilize different groups of society,"said Mr O'Donnell. Since the last UNDP National Report on the Power of Decentralization was published in 2003, Ukraine has gone through a period of significant political and economic transformation: democracy has strengthened and the transition to a full-fledged market economy continues. Deputy Prime Minister of Ukraine Hryhoriy Nemyria applauded the presentation of the new UNDP National Report and was pleased that the authors drew attention to such topics as human development and European integration of Ukraine. "In this context, we fully support the idea that European integration is not a purely foreign policy priority but, above all, an action plan for internal reforms. I am convinced that if we are to succeed in ensuring human development, then we must use all the tools available.

In our case, European integration is perhaps the most effective tool," he added. However, despite such significant achievements, there are still many challenges ahead that need timely response from civil society and government at all levels, the report's authors say. It should be noted that many initiatives were proclaimed at one time, but the progress in implementing the necessary reforms to promote human development is poor. According to the latest UNDP Global Human Development Report, Ukraine ranks 76th out of 177 countries in terms of development and is considered a medium-sized human development country.

The report found that, by most indicators, Ukraine is far behind all EU Member States, including its closest neighbors, namely Hungary (36th place), Poland (37th place), Slovakia (42nd place), Bulgaria (53 place) and Romania (60th place) that have recently joined the EU. Given that Ukraine has proclaimed and repeatedly affirmed that its main foreign policy goal is accession to the EU, the

authors of the Human Development and European Choice of Ukraine report analyze how policies aimed at European integration can greatly enhance human development and how much they can benefit from country from the implementation of the European integration policy.

Speaking at the presentation, The report's authors argue that the desire for European integration, often referred to as the "European Choice", is not a purely geopolitical choice process, but is, above all, a human development process that has a direct impact on people's lives and well-being. The report explains that the concept of human development based on people's interests is very similar to the process of European integration, in terms of meeting specific requirements and introducing separate standards. However, both concepts lead to the improvement of human life.

Current trends in life expectancy change among the population of the EU Member States, on the one hand, and the population of Ukraine and the CIS, on the other, provide the best evidence of the impact of the practical implementation of the European integration strategy on human development. As a result, the Report argues that, in terms of the economic, social and institutional environment required to promote long-term sustainable human development, the goals of the two concepts are completely consistent. Effective implementation of European integration policies by the country significantly contributes to the achievement of higher standards of living and the creation of a safer environment for human development.

The report notes that European integration is a complex process and involves the implementation of far-reaching political, economic and social reforms that are necessary not only to achieve Ukraine's strategic goals of EU accession, but also, more importantly, to identify the principles and foundations for further development. Countries in general. It is worth noting that in the public polls reported in the Report, all Ukrainian respondents demonstrate a clear preference for European values and European mechanisms for social organization. However, understanding of European values, the complex mechanisms and functions of the EU, as well as the benefits and disadvantages of European integration are still quite limited in Ukrainian society.

In most cases, the EU is viewed from a political point of view, while its nature, as a complex economic and social mechanism, is often neglected and undervalued. The same applies to the need to improve public awareness of possible challenges for Ukraine in the future. Having a better understanding of these concepts will help every citizen to take a more active role in monitoring the implementation of the state's European integration policy. The report stresses the need to support deeper economic integration and the introduction of EU regulatory and rules within the existing European Neighborhood Policy program. The Report states that in order to improve living conditions and improve the index of human development index, health services, access to education and utilities need to be improved.

The report calls for the full implementation of administrative reform and decentralization of power from the center to regions and districts, as well as the creation of strong self-government structures, thereby enabling better service delivery and a fairer distribution of economic development. All this will contribute to the achievement of human development goals, since consumer goods and services must be provided by the authorities directly in the places where people live and work. The availability of financial and other resources at the local level is an essential prerequisite for achieving human development goals and objectives. The report examines the experience of new EU member states and points out that the benefits of EU membership far outweigh the cost of acquiring that membership. Free trade agreements with the EU create a huge motivation for trade growth.

However, since EU FTAs do not generally cover all agricultural products, it is important for Ukraine to achieve the widest possible access to the European agrarian market - especially because it gives clear benefits to the consumers of the European Union. Open access to European markets is likely to contribute to a significant inflow of foreign direct investment into Ukraine, provided that investors are confident in the predictability of policy and the rule of law. The confidence of foreign investors can be gained if all the executive forces in Ukraine demonstrate their ability to constantly implement European standards relating to the further

development of a market economy and popular democracy, the report's authors believe.

#### Case questions:

- 1. What is included in the concept of human development?
- 2. Did the accession of Hungary, Poland, Slovakia, Bulgaria and Romania affect human development, which according to the reports ranked next in the ranking of countries with the most effective human development, Hungary ranked 36th, Poland 37th, Slovakia 42nd, Bulgaria 53rd. and Romania 60th place?
- 3. Can Ukraine be ranked 76th in the ranking of the most effective human development countries because of the ineffective implementation of integration policy in the European Union?

#### Control questions to determine students' level of learning

- 1. The structure and content of the international economic environment.
- 2. Licensing agreements in international business.
- 3. Subject of the license agreement: patents, know-how, trademark, industrial design.
  - 4. Types of licenses: simple, exclusive, complete.
  - 5. License price and its factors.
  - 6. Features of international leasing.
  - 7. Reinsurance system in international business.
  - 8. Objects of international insurance relations.
  - 9. Trends in international labor migration.
  - 10. State and international regulation of international labor migration.
  - 11. Features of selling know-how. Methods of payment know-how.
- 12. Exchanges of complex scientific and technical knowledge and trade secrets of know-how.
  - 13. Basic types, forms and methods of leasing.
  - 14. Factors of leasing development.
  - 15. Basic engineering methods.

- 16. Engineering as a special type of foreign business for the provision of engineering consulting services.
- 17. Personnel transfers in foreign operations, training of managers in the international business environment.
  - 18. Coordination and integration of divisions of international corporations.
  - 19. Integrated structures of international business.

### An example of questions in the scorecard

- 1. To the sources of formation of the normative basis of activity international organizations do not include:
  - a) international agreements (treaties);
  - b) international conferences (symposia);
  - c) international customs;
  - d) international codes of conduct
- 2. How many countries have signed the general principles of international relations set out in the Final Act of the Conference on Security and Cooperation in Europe:
  - a) 10
  - b) 25
  - c) 35
  - d) 50

#### 3. Administrative law is:

a) law, which covers issues related to its sources (statutes and treaties on which international organizations are based), the quality of members of the organization and its bodies;

- b) law, which covers issues concerning its sources (statutes and treaties on which international organizations are based), the quality of members of the organization and its bodies;
- c) the law governing the formation and expenditure of the organization's funds (own budget, special funds, membership fees of Member States, fees for services, etc.).
  - d) there is no correct answer.

## 4. The main aspect of foreign trade operations for trade in patents and licenses are:

- a) purchase or sale of patents (other security documents);
- b) granting abroad licenses for the use of inventions, technical knowledge and experience, as well as trademarks;
  - c) exchange of licenses in modern conditions;
  - d) protection of inventions by means of patent legislation.

## 5. The main form of scientific and technical exchange between countries:

- a) foreign trade agreements for the sale of patents;
- b) International exchange of licenses;
- c) international trade in licenses;
- d) mandatory patenting.

## 6. What is the average period of validity of the patent:

- a) 6-9 years;
- b) 10-12 years;
- c) 15-20 years;
- d) up to 50 years.

#### 7. With an exclusive license:

- a) the licensor has the right to use the invention himself and allows the licensee to use the invention only;
- b) the licensor allows, under certain conditions, to use the invention of the licensee, while retaining the right to both independently use and issue similar licenses to other interested parties;
  - c) the licensor fully transfers the rights to the licensee;
- d) permission issued by the licensor to the licensee for industrial and / or commercial use of the invention.

### 8. Depending on the content, "know-how" can be design:

- a) echnological, production, management, commercial, financial.
- b) financia, production, management;
- c) commercial, financial, echnological, production, management, planning;
- d) Technical, general, commercial.

# 9. What kind of International Research and Production Associations does the IAEA belong to?

- a) international research organizations;
- b) international research institutes;
- c) international scientific and technical laboratories;
- d) international scientific and technical centers.

### 10. What is the difference between know-how and engineering:

- a) know-how is knowledge, engineering is experience;
- b) they have the same meaning;
- c) know-how is experience, engineering is knowledge;
- d) both include staff training and retraining.

## 11. The license agreement is executed by:

a) sale of patents; sale of licenses for all types of patented property;

- b) sale of "know-how", engineering;
- c) foreign investment, if they are accompanied by an inflow of investment goods, as well as leasing;
  - d) the entire volume of technology transfer in commercial form.

#### 12. What is the main goal of the priority areas of INTS development?

- a) Greening;
- b) Automation of production;
- c) Introduction of Industry 4.0;
- d) Space travel.

#### 13. The main types of license agreements are as follows:

- a) exclusive, general, individual;
- b) simple, exclusive, complete;
- c) limited, open;
- d) short, medium, long.

## 14. What is not the subject (object) of intellectual property:

- a) the latest technologies and production and other experience;
- b) scientific discoveries, know-how, and inventions;
- c) means of production and legal documents;
- d) prototype or industrial samples of equipment, apparatus, tools, production lines.

## 15. The prepayment includes:

- a) reimbursement of the licensor's expenses before the implementation of the license agreement;
- b) fixation in the agreement of the sums which are paid once (or in installments);
  - c) exchange of licenses or patents, which are presumed to be equivalent;

d) transfer of securities and granting the right to participate in profits.

### 16. Depending on the scope of engineering services, there are:

- a) design and consulting engineering;
- b) technological engineering;
- c) leasing engineering;
- d) managerial engineering.

# 17. Engineering related to ensuring the process of production and sale of products does not include:

- a) services for the management and organization of the production process;
- b) equipment inspection and testing services;
- c) services for the preparation of contract documentation;
- d) assistance in financial matters.

### 18. The subjects of the world technology market are:

- a) engineering;
- b) consulting;
- c) technology;
- d) firms.

## 19. The main aspect of foreign trade operations for trade in patents and licenses are:

- a) purchase or sale of patents (other security documents);
- b) granting abroad licenses for the use of inventions, technical knowledge and experience, as well as trademarks;
  - c) exchange of licenses in modern conditions;
  - d) protection of inventions by means of patent legislation.

## 20. What is the average period of validity of the patent:

- a) 6-9 years;
- b) 10-12 years;
- c) 15-20 years;
- d) up to 50 years.

#### 21. Depending on the scope of engineering services, there are:

- a) design and consulting engineering;
- b) technological engineering;
- c) leasing engineering;
- d) managerial engineering.

#### 22. With an exclusive license:

- a) the licensor has the right to use the invention himself and allows the licensee to use the invention only;
- b) the licensor allows, under certain conditions, to use the invention of the licensee, while retaining the right to both independently use and issue similar licenses to other interested parties;
  - c) the licensor fully transfers the rights to the licensee;
- d) permission issued by the licensor to the licensee for industrial and / or commercial use of the invention.

## 23. Depending on the content, "know-how" can be design:

- a) echnological, production, management, commercial, financial.
- b) financia, production, management;
- c) commercial, financial, echnological, production, management, planning;
- d) Technical, general, commercial.

## 24. What is the difference between know-how and engineering:

- a) know-how is knowledge, engineering is experience;
- b) they have the same meaning;

- c) know-how is experience, engineering is knowledge;
- d) both include staff training and retraining.

### 25. The prepayment includes:

- a) reimbursement of the licensor's expenses before the implementation of the license agreement;
- b) fixation in the agreement of the sums which are paid once (or in installments);
  - c) exchange of licenses or patents, which are presumed to be equivalent;
  - d) transfer of securities and granting the right to participate in profits.

## 26. The main form of scientific and technical exchange between countries:

- a) foreign trade agreements for the sale of patents;
- b) International exchange of licenses;
- c) international trade in licenses;
- d) mandatory patenting.

## 27. The license agreement is executed by:

- a) sale of patents; sale of licenses for all types of patented property;
- b) sale of "know-how", engineering;
- c) foreign investment, if they are accompanied by an inflow of investment goods, as well as leasing;
  - d) the entire volume of technology transfer in commercial form.

## 28. What is the main goal of the priority areas of INTS development?

- a) Greening;
- b) Automation of production;
- c) Introduction of Industry 4.0;
- d) Space travel.

### 29. The main types of license agreements are as follows:

- a) exclusive, general, individual;
- b) simple, exclusive, complete;
- c) limited, open;
- d) short, medium, long.

### **30.** The subjects of the world technology market are:

- a) engineering;
- b) consulting;
- c) technology;
- d) firms.

# 31. What kind of International Research and Production Associations does the IAEA belong to?

- a) international research organizations;
- b) international research institutes;
- c) international scientific and technical laboratories;
- d) international scientific and technical centers.

### 32. Depending on the scope of engineering services, there are:

- a) design and consulting engineering;
- b) technological engineering;
- c) leasing engineering;
- d) managerial engineering.

# 33. Engineering related to ensuring the process of production and sale of products does not include:

- a) services for the management and organization of the production process;
- b) equipment inspection and testing services;
- c) services for the preparation of contract documentation;

#### REFERENCES

- 1. Joel Trachtman, *The Economic Structure of International Law* (Harvard, 2008).
- 2. Andrew Lang The judicial sensibility of the WTO Appellate Body' European Journal of International Law (2017) 27 (4) pp.1095-1105 available at: <a href="https://academic.oup.com/ejil/article/27/4/1095/2962221">https://academic.oup.com/ejil/article/27/4/1095/2962221</a>
- 3. Jan Kleinheisterkamp 'Investment Protection in TTIP: Three Feasible Proposals' (with Lauge Poulsen), in European Yearbook of International Economic Law 2016 (Bungenberg et al eds, Springer 2016), pp. 527-541. [link to underlying policy paper] available at: <a href="https://link.springer.com/chapter/10.1007%2F978-3-319-29215-1\_23">https://link.springer.com/chapter/10.1007%2F978-3-319-29215-1\_23</a>
- 4. Andrew Lang 'The double movement of law and expertise' in Erin Hannah, James Scott, Silke Trommer (eds) Expert Knowedlge in Global Trade (Routledge: 2016) available at: <a href="https://www.routledge.com/Expert-Knowledge-in-Global-Trade-1st-Edition/Hannah-Scott-Trommer/p/book/9781138787773">https://www.routledge.com/Expert-Knowledge-in-Global-Trade-1st-Edition/Hannah-Scott-Trommer/p/book/9781138787773</a>
- 5. Andrew Lang 'Twenty years of the WTO Appellate Body's "fragmentation jurisprudence" Journal of International Trade Law and Policy (2015) 14 (3) pp.116-125 available at: <a href="http://eprints.lse.ac.uk/64810/1/WTO20.pdf">http://eprints.lse.ac.uk/64810/1/WTO20.pdf</a>
- 6. Jan Kleinheisterkamp 'Financial Responsibility in European International Investment Policy' (2014) 63:2 International and Comparative Law Quarterly pp. 449-476 available at: <a href="https://www.cambridge.org/core/journals/international-and-comparative-law-quarterly/article/financial-responsibility-in-european-international-investment-policy/CD5DF95979E240BE76A22988EB5230B7">https://www.cambridge.org/core/journals/international-and-comparative-law-quarterly/article/financial-responsibility-in-european-international-investment-policy/CD5DF95979E240BE76A22988EB5230B7</a>
- 7. Andrew Lang 'The Consequences of Brexit: Some Complications From International Law' LSE Law: Policy Briefing Papers 3/2014 available at: <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2482323">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2482323</a>
- 8. Andrew Lang 'Governing "As If": Global Subsidies Regulation and the Benchmark Problem' Current Legal Problems (2014) Volume 67, Issue 1 pp. 135-168. available at: <a href="http://eprints.lse.ac.uk/59897/1/\_lse.ac.uk\_storage">http://eprints.lse.ac.uk/59897/1/\_lse.ac.uk\_storage</a>

- LIBRARY Secondary libfile shared repository Content Lang,%20A Lang Governing global %20subsidies 2014 Lang Governing global %20subsidies 2014 .pdf
- 9. Andrew Lang 'Reflecting on 'linkage': cognitive and institutional change in the international trading system'. In: Steger, Debra, (ed.) The World Trade Organization. Critical Perspectives on the World Economy (Routledge, Taylor & Francis 2014)
- 10. Andrew Lang 'The Hidden World of WTO Governance: A Rejoinder to Richard H. Steinberg' European Journal of International Law 2009 20 (4):1073-1076 [reprinted in Steger, Debra P, The World Trade Organization: Critical Perspectives on the World Economy (London: Routledge 2014) pp.575-614] (with Joanne Scott) available at: <a href="http://www.ejil.org/pdfs/20/4/1946.pdf">http://www.ejil.org/pdfs/20/4/1946.pdf</a>
- 11. Chris Thomas, Book Review: 'Isabel Feichtner, The Law and Politics of WTO Waivers: Stability and Flexibility in Public International Law' (2011) 82(1) British Year Book of International Law 515-18
- 12. Jan Kleinheisterkamp 'European policy space in international investment law'ICSID Review 2012, 27(2), 416-431 available at: <a href="https://academic.oup.com/icsidreview/article-abstract/27/2/416/639337?redirected">https://academic.oup.com/icsidreview/article-abstract/27/2/416/639337?redirected</a>
  From=fulltext
- 13. Andrew Lang 'Legal regimes and professional knowledges: the internal politics of regime definition' in Young, Regime Interaction in International Law: Facing Fragmentation (Cambridge UP, 2012) available at: <a href="http://www.cambridge.org/catalogue/catalogue.asp?isbn=113921134X">http://www.cambridge.org/catalogue/catalogue.asp?isbn=113921134X</a>
- 14. Bugrov O. V. Bugrova O. O. "Turnkey" contracts and project management. Management of complex systems development. 2013. № 16. P. 5 10.
- 15. Voynarenko M. P. Bereza A. A. The current state and problems of free development economic zones in Ukraine. Visnyk ZhDTU. 2012. № 2 (48). P. 30–36.
- 16. Govorushko T. A., Obushna N. I. The essence of foreign direct investment and their classification. Theories of micromacroeconomics. 2013. №. 41. P. 91–99.

- 17. "Cheap" franchising: cost, income, nuances [Electronic resource]. Access mode: http://ua.prostobiz.ua/biznes/biznes\_start/statti / desheviy\_franchayzing\_vartist\_dohodi\_nyuansi.
- 18. Kozak Yu.G. International Economics: textbook. manual [Electronic resource]. 2nd type. lane. and ext. Kyiv: Training Center Literature, 2008. 1118
   p. Access mode: http://pidruchniki.com/15410104 / ekonomika / pryami\_inozemni\_investitsiyi.
- 19. Komar I. S. Types of offshore zones and their impact on the organization accounting [Electronic resource]. Effective economy. 2014. № 6. Access mode: http://www.economy.nayka.com.ua/? op = 1 & z = 3111.
- 20. Lazareva O. V. International management: a textbook. Mykolaiv: BSU Publishing House named after Petra Mogili, 2009. 188 p.
- 21. Makedon V. V. Format of interaction of transnational corporations and real sector of the national economy. Foundation Friedrich Ebert. December, 2012. Access mode: http://library.fes.de/pdf-files/bueros/ukraine/09718.pdf.
- 22. Ovcharuk M. P. Features of the spread and impact of TNCs on the economy Of Ukraine
- 23. Skibitsky O. M. Business organization: business management activities: textbook. manual for students. [Electronic resource] / O. M. Skibitsky, VV Matveev, LI Skibitskaya. Kyiv: Condor Publishing House, 2011. 912 p. Access mode: http://pidruchniki.com/1400091441995/menedzhment/odnoosibne\_volodinnya\_yo go\_perevagi\_nedoliki.
- 24. Sweet M. O. Exchange market: textbook. way. Kyiv: Sources M, 2005. 133 p.
- 25. Teslya S. M. Foreign direct investment as an economic category, their essence and Classification. Scientific Bulletin of NLTU of Ukraine. 2009. №. 19.3. P. 131–139.
- 26. Shkurupiy O. V. Foreign economic activity of the enterprise: textbook. way. [Electronic resource]. Kyiv: Center educational literature, 2012. 248 p. Access

/

http://pidruchniki.com/10560412/ekonomika

vidi zovnishnoekonomichnih operatsiy

mode:

- 27. Shutova O. S. Free economic zones as a kind of territorial tax exemptions. Journal of Kyiv University rights. 2013/1. P. 157–161.
- 28. Varnaliy Z. Osnovy pidpryiemnytstva: Navchalnyi posibnyk. 3rd ed., Corrected. and add. K.: Knowledge Press, 2006. 350 p.
- 29. Vinogradskaya A. Fundamentals of Entrepreneurship: Textbook. aid. 2nd ed., Reworked. and add. K.: Condor, 2005. 540 p.
- *30.* Getman O. Economics of the enterprise: Textbook. Ministry of Education and Science of Ukraine, Dnipropetrovsk University of Economics and Law. Kyiv: Training Center Literature, 2006. 487 p.
- 31. Gill, Charles W.L. International Business: Competition in the Global Market: Per. in English ..- K .: Published by Solomiya Pavlychko "Fundamentals", 2001. 856p.
- 32. Economy of foreign countries: Textbook. manual / Ed. Kozaka Yu.G., Kovalevsky V.V. К .: ЦУЛ, 2007
- 33. Novitsky V. E. International economic activity of Ukraine. Textbook. K. 2003.
- *34.* Makogon Yu.V., Orekhova TV International management: Course of lectures. Donetsk: Don NU, 2003. 277p.
- 35. International business: a textbook. 2 editions. Kyiv: Ukrainian Orthodox Church "Kyiv University », 2009. 623 p.
- *36.* International Economics: Teaching method. way. for self. studied disciplines /For order. AM Lieutenant; Ministry of Education and Science of Ukraine; Kiev. Nat. econ. un t. K .: KNEU, 2005. 156 c
- 37. International organizations: Textbook / Ed. Kozaka Y.G., Yekhanurova Y.I., Kovalevsky V.V. К .: ЦУЛ, 2005.
- 38. Rumyantsev A.P. International Economics :: Workshop / A.P. Rumyantsev, Yu.O. Kovalenko; Kiev. econ. Institute of Management (ЕСОМЕN). К .: ЦУЛ, 2007. 296 р.

- 39. International Management: Textbook. manual / Ed. О.Б.Чернеги. К., 2006. 9. International integration processes of today. Monograph / A.S. Filipenko, VS Budkin et al. / K .: Knowledge of Ukraine, 2004.
- 40. World Economy: Textbook. manual./Ed. Yu.G. Kozak and others. K .: CUL, 2010. 327 p.
- 41. World Economy: Textbook / A.S. Filipenko, VS Budkin, OI Stag. K.: Lybid, 2007. 640 p.
- 42. Management of foreign economic activity: Textbook. manual / Ed. prof. AIKredisova. 2nd ed., Supplement. K .: VIRA-R, 2002. 550p.
- 43. Filipenko A.S. International Economic Relations. History: Textbook. K .: Lybid, 2006.
- 44. Chuzhikov, V.I. Economics of foreign countries: Textbook. aid. K .: KNEU, 2005. 308 p.