Lack of Storage Space for Dangerous Goods: Case Study of the Pristina International Airport "Adem Jashari"

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Abstract

The purpose of this paper is to define the dangerous goods classes and the lack of storage in Kosovo. The Pristine International Airport “Adem Jashari” (PIA) is the only airport that Kosovo has, and knowing that the number of flights in Kosovo is growing pushed me to analyze the current situation that is going on. The research method that is used in this paper covers an interview with professional people who are responsible for this issue. The research continued with empirical results from the questionnaire developed with a monkey survey covering 100 respondents. Further in the research paper, the author covers marking, labeling and the orientation of the packages that are used for dangerous goods during air transportation. In Kosovo, the Civil Aviation Authority (CAA) is responsible to firstly identify if the goods meet the condition asked from these authorities or not. Therefore, in case of any individuals or airlines wants to transport goods via air, they should ask for permission from CAA and after that, they might proceed with further application procedures. In the last part, the author gives some recommendations resulting from the findings of this research.

Keywords: airport; air transport; classification of goods; dangerous goods; Kosovo;
1. Introduction

As in every country, the Pristina International Airport transports different goods during the flights and among the goods that we will consider are the transportation and storage of dangerous goods by air. “Dangerous goods are items or substances that when transported by aircraft are a risk to health, safety, property or the environment. These include obvious things, such as explosives, radioactive materials, flammable liquids, dangerous or volatile chemicals, strong acids, compressed gases, poisons, and aerosols. (Civil Aviation Safety Authority, 2020). Dangerous goods may be pure chemicals, mixtures of substances, manufactured products or articles which may pose a risk to life. This is if they are not treated properly in everyday use or transportation. When we talk about the danger we are dealing with goods that are dangerous in specific cases when they are not adequately packaged and can lead to various incidents, possibly with fatality. "Additionally, did you know that perfume, nail polish, and paint are usually flammable?" (Dgd Transport, 2019). Many products we deal with daily can be hazardous to our health if we come into contact with them. Packaging of such substances is very important considering also home cleaning fluids or gardening products which for us perform an effective service. "Many products in kitchens, bathrooms, utility sheds and workshops contain caustic chemicals and solvents that can threaten family health and/or damage the environment." (Spradley, 2007).

On the other hand, these items on the upper or back of the packaging feature the sign known as danger by possessing the symbols which can only be perceived as dangerous by touch. “The technical instructions further define dangerous goods incidents as occurrences, other than dangerous goods accidents,” associated with and related to the transportation of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property or environmental damage; fire; Breakage; spillage; leakage of fluid or radiation; or other evidence that the integrity of the packaging has not been maintained. ” (Pierobon, 2015). The current problem at PIA (Pristina International Airport) is the lack of warehouses for storing dangerous goods. PIA does not have any depots, even in the emergency landing aircraft that may carry cargo of these goods. Moreover, in these situations, there might be an advantage of the neighboring airports such as those of
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Skopje or Albania. “New facilities — refrigeration room, cold room - enable handling and processing of all types of perishable cargo, while the well-coordinated and spacious warehouse meets all types of storage needs, irrespective of volume or weight. TIA Cargo Handling can also accommodate all types of special cargo and dangerous goods with top standard on-site structures and staff.” (Tirana International Airport, 2019). The purpose of the author in this topic is to examine the current problem, to research for improvements, and to find a solution to resolve this issue.

2. Dangerous goods and their classifications

“Dangerous goods are articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in these Regulations or which are classified according to these Regulations. The UN Subcommittee of Experts on the Transport of Dangerous Goods (SCoETDG) develops recommended procedures for the transport of all types of dangerous goods except radioactive materials. These procedures, applicable to all modes of transport, are published in the Recommendations on the Transport of Dangerous Goods- Model Regulations (18th revised edition).” (Dangerous Goods Regulations, 2015). “Many common items used every day in the home or workplace may seem harmless but when transported by air can be very dangerous. In-flight, variations in temperature and pressure can cause items to leak, generate toxic fumes or start a fire.” (Civil Aviation Authority of Kosovo, 2020). Therefore, as everyday products are cosmetics (perfumes, hair sprays, and shampoos), hygienic cleaning fluids, various medications, etc. Moreover, in terms of the classification of dangerous goods, there are nine classes which we will illustrate in further detail. “Dangerous goods are defined as those goods which meet the criteria of one or more of nine UN hazard classes and, where applicable, to one of three UN Packing Groups.” (Dangerous Goods Regulations, 2015, p. 129). So, when we classify the dangerous goods there are nine classes listed below: 1. Explosives 2. Gases 3. Flammable Liquids 4. Flammable Solids 5. Oxidizing Substances 6. Toxic & Infectious Substances 7. Radioactive Material 8. Corrosives 9. Miscellaneous Dangerous Goods. (Dangerous Goods Regulations, 2015) Whatever the risk is, each of these goods has a particular risk handling especially when it comes to their storage and air transportation. “Explosives are capable by chemical reaction of producing gases at
temperatures, pressures, and speeds as to cause catastrophic damage through force and/or of producing otherwise hazardous amounts of heat, light, sound, gas or smoke.” (The 9 Classes of Dangerous Goods, 2019).

Explosive. “Explosives are capable by chemical reaction of producing gases at temperatures, pressures, and speeds as to cause catastrophic damage through force and/or of producing otherwise hazardous amounts of heat, light, sound, gas or smoke.” (Atlas, 2019). Explosives are divided into six sub-division such as: “Division 1.1 - Articles and substances having a mass explosion hazard. • Division 1.2- Articles and substances having a projection hazard but not a mass explosion hazard. • Division 1.3- Articles and substances having a fire hazard, a minor blast hazard and/or a minor project- • on hazard but not a mass explosion hazard. • Division 1.4- Articles and substances presenting no significant hazard. • Division 1.5- Very insensitive substances having a mass explosion hazard. • Division 1.6-Extremely insensitive articles which do not have a mass explosion hazard.” (UN Report, 2015, p. 129). “Commonly transported Class 1 Dangerous Goods include ammunition, fireworks, airbag inflictor's and fuse, etc.” (TGD, 2019).

Gases. “It covers compressed gases, liquefied gases, dissolved gases, refrigerated liquefied gases, mixtures of gases and aerosol dispensers/articles containing gas. There are 3 sub-divisions: Division 2.1: Flammable gases Division 2.2: Non-flammable, non-toxic gases Division 2.3: Toxic gases.” (TGD, 2019).

Flammable liquids. “This class has no subdivisions. It comprises liquids or mixtures of liquids or liquids containing solids in solution or suspension (for example paints, varnishes, lacquers, etc., but not including substances otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60°C closed-cup test or not more than 65.6°C open-cup test normally referred to as the flashpoint.” (UN Report, 2015, p. 136). The higher the boiling process is, the higher the speed of vapour will form in liquids.

Flammable solid. “Flammable solids are materials which, under conditions encountered in transport, are readily combustible or may cause or contribute to fire through friction, self-reactive substances which are liable to undergo a strongly exothermic reaction or solid desensitized explosives. Sub-Divisions 4.1: Flammable solids. 4.2: Substances liable to spontaneous combustion. 4.3: Substances which, in contact with water, emit flammable gases.” (Hazmat Logistics, 2020).
**Substance oxidizing.** These substances have two sub-classes. “Subclass 5.1: Oxidizing agent means a material that may, generally by yielding oxygen, cause or enhance the combustion of other materials. Subclass 5.2: Organic peroxide oxidizing agent Organic peroxide means any organic compound containing oxygen in the bivalent structure and which may be considered a derivative of hydrogen peroxide, where one or more of the hydrogen atoms have been replaced by organic radicals. Reason for regulation Oxidizers, although not necessarily combustible in themselves, can yield oxygen and in so doing cause or contribute to the combustion of other materials. Organic peroxides are thermally unstable and may exude heat whilst undergoing exothermic autocatalytic decomposition.” (Euroasian cargo solution).

**Toxic and infectious substances.** Toxic substances are substances that are divided into two sub-divisions. “Toxic substances are substances that are liable to cause death or injury or harm to human health if swallowed, inhaled or contacted by the skin. Note: Toxins from plant, animal or bacterial sources that do not contain any infectious substances.” (Dangerous Goods Regulations, 2015, p. 146). “Infectious substances are substances that are known or are reasonably expected to contain pathogens. Pathogens are defined as micro-organisms (including bacteria, viruses, rickettsia, parasites, fungi) and other agents such as prions that can cause disease in humans or animals.” (Dangerous Goods Regulations, 2015, p. 151)

**Radioactive.** "Radioactive material is defined as: 'any material containing radionuclides where both the concentration of activity and the total activity in the consignment exceed the values specified in the relevant standard.'" (Atlas, 2019). Like any atomic change, they emit invisible radiation that can cause chemical substances that damage the body without being noticed.

**Corrosive substances.** This class is very dangerous because it will be activated by chemical action. "Class 8 substances (corrosive substances) are substances which, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport (AIDGC Report, 2016)

**Miscellaneous Dangerous Goods** “are substances and articles which during transport present a danger or hazard not covered by other 8 classes. This class encompasses, but is not limited to, environmentally hazardous substances, substances that are transported at elevated temperatures,
miscellaneous articles and substances, genetically modified organisms and micro-organisms and (depending on the method of transport) magnetized materials and aviation regulated substances. (TGD, 2019).

3. Packaging of dangerous goods and the UN symbol

Each item that must be shipped, firstly it must be properly packaged to meet all the requirements of the aviation regulations of IATA's.

**Figure 1. UN symbol**

![UN symbol](image)

UN Dangerous Goods Regulation guides all goods to be packaged to be eligible for air transport with a wide range of inside and outside of the packing box.

Source: Dangerous Goods Regulations, 2015

Packaging guidelines normally require the use of United Nation/UN-tested performance specifications. A very important packaging specification is the UN code which is available to be used only for labelling the packages that are shipped but, no one is allowed to use this code without approval.
Table 1: Examples of UN Specification Markings- New Packaging

<table>
<thead>
<tr>
<th>Package</th>
<th>UN Symbol</th>
<th>Code</th>
<th>Packing Group</th>
<th>Gross Weight</th>
<th>Solid or LIq</th>
<th>Relative Density</th>
<th>Test Pressure</th>
<th>Year of Manufacture</th>
<th>State</th>
<th>Manufacturer</th>
<th>Complete Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiberboard box</td>
<td>456</td>
<td>Y</td>
<td>145</td>
<td>S</td>
<td></td>
<td></td>
<td>16</td>
<td>NL</td>
<td>VJU25</td>
<td></td>
<td>40/0165/YJU25 NL/VJU25</td>
</tr>
<tr>
<td>Fiberboard box</td>
<td>465</td>
<td>X, Y, Z</td>
<td>20, 30, 45</td>
<td>S</td>
<td></td>
<td></td>
<td>16</td>
<td>NL</td>
<td>ABC1234</td>
<td></td>
<td>40/026-YJU25 NL/ABC1234</td>
</tr>
<tr>
<td>Glass drum to contain liquid</td>
<td>1515</td>
<td>Y</td>
<td>120</td>
<td>160</td>
<td>160</td>
<td>NL</td>
<td>VJU25</td>
<td></td>
<td></td>
<td></td>
<td>101/14/YJU25 NL/VJU25</td>
</tr>
<tr>
<td>Glass drum to contain solid or liquid packaging</td>
<td>1522</td>
<td>Y</td>
<td>150</td>
<td>0</td>
<td>160</td>
<td>NL</td>
<td>VJU25</td>
<td></td>
<td></td>
<td></td>
<td>144/0240-YJU25 NL/VJU25</td>
</tr>
<tr>
<td>Plastic box of equivalent specification</td>
<td>4699</td>
<td>Y</td>
<td>150</td>
<td>0</td>
<td>160</td>
<td>NL</td>
<td>VJU25</td>
<td></td>
<td></td>
<td></td>
<td>40/9993/YJU25 NL/VJU25</td>
</tr>
</tbody>
</table>

Source: Dangerous goods regulations, 2015

“This symbol must not be used for any purpose other than certifying that a packaging complies with the relevant requirements in Section 6. For embossed metal packaging the capital letters "UN" may be applied as the symbol; (b) the code number designating the type of packaging according to 6.0.3; (c) the letter X, Y, or Z, designating the packing group(s) for which the design type has been successfully tested: • X for Packing Group I (these packaging may be used for Packing Group I, II and III articles and substances); or • Y for Packing Group II (these packaging may be used for Packing Group II and III articles and substances); or • Z for Packing Group III (these packaging may be used for Packing Group III articles and substances only).” (UN Report, 2015, p. 595)

In the above table (1) you can see an example in tabular form which is defined in detail the code label that should be attached in the package and get ready for the transport. Regardless of the specific elements that exist to protect the package during air transportation, we have to pay attention also in which packing group does it belong. "Flammable liquids are assigned to the packaging groups according to the flashpoint and the boiling point of the liquid." (Dangerous Goods Regulations, 2015, p. 137). Dangerous goods packages are divided into three groups. In group I there are goods which covers high danger, in group II are goods with a medium range of risk and group III covers the goods in the lower danger. These grouping packages
are very important because it will set the degree of possible protective packaging.

**Table 2: Packing group**

<table>
<thead>
<tr>
<th>Packing group</th>
<th>Filxhan i mbyllur °C</th>
<th>Pika e vlimit °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>–</td>
<td>≤ 35</td>
</tr>
<tr>
<td>II</td>
<td>&lt; 23</td>
<td>&gt; 35</td>
</tr>
<tr>
<td>III</td>
<td>≥ 23 to ≤ 60</td>
<td>&gt; 35</td>
</tr>
</tbody>
</table>

Source: Dangerous goods regulations 2015

Table (2) presents the grouping of goods which are divided into three groups depending on the risk, the goods are listed as X, Y, and Z. Group I (x): lists all goods that can be flammable if placed in water and their boiling point exceeds 35 °C, this is an example for Acids. Group II (y): are the goods where their substance reacts easily with water and does not meet the criteria for packing group I. Therefore, before selecting the goods that fit into this group, firstly we have to test that particular good to detect the reaction of the heat, then we would know in which group it belongs to. Group III (z): taking into account substances that are composed of thicker materials such as paints, adhesives, and lotions, metallic powders have a hazardous boiling point of less than 23 °C so its less than 35 °C. “The packing group also determines the degree of protective packaging required. Packages and containers for dangerous goods that have passed rigorous performance testing usually bear UN specification marks (see example below). X, Y, and Z will be used to indicate whether the package is suitable for all 3 packing groups or just 1 packing group. (TGD, 2019).

### 3.1 Marking, labelling and orientation of the package

Every package box that contains inland dangerous goods is labelled depending on the type of goods, always adhering to the appropriate label (s) listed by IATA regulations. “The shipper is responsible for all necessary marking and labelling of each package of dangerous goods, and each over pack containing dangerous goods, in compliance with these Regulations. Each package must be of such a size that there is adequate space to affix all required markings and labels.” (UN Report, 2015, p. 641). “Packages are marked to provide information about the contents of the package, the
nature of the hazard, and the packaging standards applied. All marks on packages or over-pack shall be placed in such a way that they are visible and not covered by any other label or mark.” (WHO Report, 2017). Therefore, it “refers to UN number, proper shipping names, UN specification marks, and other markings if applicable (i.e. orientation arrows, environmentally hazardous substances mark for UN 3077 and UN 3082 and excepted quantities mark); Labelling: mainly means hazard symbols (and handling labels) displayed on small means of packages (usually less than 450 litters)” (TGD, 2019).

**Figure 2:** Marking with UN packing symbol

![UN Packing Symbol](image.png)

Source: Chamsafetypro

As mention before, each of the dangerous goods must be tested before being packaged for air transportation and must be identified prior to shipment to avoid any incident that may lead to fatality if any of the goods in neglecting by not getting the adequate testing. “The inner packaging must be packed in such a way, fixed or wrapped to prevent it from any breaking or leaking during the transport and to control its movement inside the outside of the package during the normal air transport conditions. The softening and absorbing materials must not react dangerously to the contents of the packaging. (CAAK, 2014). In case that there is no declaration of any package of dangerous goods or it may be without proper labelling or marking, this can cause an incident inside of the airplane or even a catastrophic accident. “Undeclared dangerous goods described as "laundry products" loaded about two hours earlier almost
caused the loss of a passenger aircraft. By the time the aircraft landed, the floor had started to sag from the heat generated by a fire caused by a mixture of a hydrogen peroxide solution, an oxidizer, and about 12 kg of a sodium-based orthosilicate-based mixture (a corrosive solid.) Because the consignment was not declared as DG, no labels or orientation markings were on the package. It was loaded on its side in the cargo compartment and the liquid leaked onto the solid causing a very hot fire.

It was estimated by aircraft accident investigators that this aircraft could have broken in two within another 10-15 minutes.” (CASA Report, 2016). Therefore, it is very important that every single pack that is loaded in cargo should have the right orientation, label and marked that there is a dangerous goods inside of the particular box. But, in cases when a crew or passenger suspects that something is going wrong it may be seen a smoke or a burnt smell, then the pilot should be informed and the aircraft should consider an emergency landing. “A Virgin Australia plane had to make an emergency landing after passengers reported a "burning smell," coming from the plane, according to multiple reports.” (Pascus, 2018). Even though Kosovo doesn’t apply in a huge amount of transporting dangerous goods abroad, a very important element that faces almost every week is transporting a passenger’s wheelchairs with lithium battery. “The batteries that power wheelchairs and mobility aids are considered dangerous goods when carried by air.” (IATA, 2019).

Wheelchairs which contain lithium battery are classified in the class of corrosive goods, therefore before loading it in the airplane the operator should always check and approve if everything is packed by respecting the dangerous goods regulation. “Where the battery is removed by the user, if the mobility aid is specifically designed to allow it to be, following the manufacturer’s instructions, the battery must not exceed 300 Wh, or for a device that is fitted with two batteries required for its operation, each battery must not exceed 160 Wh.” (IATA, 2019, p. 4). The orientation of these batteries must always be in the correct position during loading and unloading so that the battery can remain installed in the carriage. The packaging of these batteries is very important, therefore, the battery terminals must be securely insulated to prevent accidental circuits. “These packaging must be marked “BATTERY, WET, WITH WHEELCHAIR” or “BATTERY WET WITH MOBILITY AID” and be labelled with the “Corrosive” label and with the “Package Orientation” label. Spill able batteries installed and removed should also be fitted, where feasible, with
spill-resistant vent caps (IATA, 2019, p. 7). In PIA there are cases where the operator decides to remove the battery from the trolley and load it separately on the aircraft because of the safety.

As with every existing airport, there may be occasions when dealing with goods that are in an unavoidable emergency, and we understand that shipment must necessarily be delivered at the designated destination. During our research, we realized that in the future there will be an extension space of Pristina International Airport to increase the capacity needed for any new airlines. Therefore, during the interview with Mr. Seferi on the question "What happens in the event of an emergency landing of any aircraft carrying a cargo of dangerous goods?" Sefer responds "If an airplane needs emergency landing because of any possible flow of cargo with dangerous goods, then it operates on an emergency plan that defines actions on how to operate depending on the class and risk of shipment, and if any another reason is that there is an emergency landing of planes then the cargo shipments are not unloaded because they have to be transported to the designated destination before departure and because our airport doesn't have a warehouse designed for dangerous goods." So, we understand that identifying the classification of dangerous goods is very important and to know the type of dangerousness if touched, spilled, changed the orientation of the packaging that could lead to different incidents, etc., anyway there should be an immediate evacuation of those packages and check for the time to deliver them into the appropriate destination. Usually in the case of evacuations, as at various airports and also at the PIA, near the aircraft parking platform, there is a unit of the fire-fighter. Fire-fighters are well trained and always ready to deal with different incidents or in case of emergency landings from other destinations by diverting in Kosovo, then fire-fighters assist and are on alert in the event of an explosion from any dangerous goods.

4. Methodology

The follow-up to this research paper will encompass the methodology of researching secondary data available electronically from local and foreign authors' books, articles from which we learn the specifics of dangerous goods. “Secondary data may include data that has been previously collected and is being considered for new questions, for which the data was not originally intended (Vartanian, 2010)”. (Martins, 2018). Relevant literature on the tradition of advancement development has been used for
the elaboration of this topic. "The great changes that take place in periods and across societies precede the need for a deeper penetration into science, the articulation of science and the implementation of advanced, unknown achievements that change behaviours, actions, and acquire skills to prevail over legalities, interactive reports, to operate at sustainable levels as competition operates." (Jakupi, 2005).

Besides using the literature, this paper is also enriched with the quantitative data collected from a questionnaire, through which we got concrete data on the opinions and attitudes of PIA workers. Basic research methods and techniques will be implemented during the preparation of the paper. “Empirical methods are employed in communication studies in an attempt to yield objective and consistent findings.” (Dan, 2017). Therefore, empirical methods will be expressed during the review of the basic literature to determine the concrete results for the examination of landfills for dangerous goods in PIA. In this regard, we elaborate the current situation of Pristina International Airport in which we get a chance to interview the director of cargo Mr. Jusuf Seferi and the trainer of dangerous goods by air Mrs. Nora Grapci who is certified regarding these goods by International Association of Air Transportation (IATA). They gave us additional information about the status of dangerous goods space in the airport. Comparative and historical methods will be used when comparing current recruitment and selection techniques by the time dimension. To examine the situation regarding the use of current spaces and those that may be used in the future for storing the dangerous goods, we get chance to have a direct interview with the director of a cargo department Mr. Yusuf Seferin, who will enrich us with detailed information and recommendations, while for the stage of organizing and processing the data we will mainly use the results obtained from the established questionnaire.

More precisely, the reader can learn about the current situation for air transportation of dangerous goods, the rules, and procedures that are should be used in Kosovo from the adequate institution. Not all companies have the capacity to handle the transportation of dangerous goods, as all airlines carry mainly passengers to their particular destinations. According to the PIA’s cargo director, Mr. Jusuf Seferi says: "The companies that operate in Kosovo more precisely at PIA and which carry dangerous goods are: Turkish Airlines and Swiss Airlines." So, it is clear that Pristina Airport cannot transport these goods, but in the future, it is expected that there will be
foreign investors who will help to expand the spaces in which there will be a certain warehouses for dangerous goods. Regarding the carriage of dangerous goods, of course, there are rules which must be observed by any airline before dealing with transportation. Any operator willing to carry dangerous goods must obtain a civil aviation license and certificate to identify what kind of material they want to transport. According to Article 57 of Law no. 03 / L-051 on Civil Aviation, “Weapons and ammunition, including explosives and harmful or poisonous gases, must be carried on board of the aircraft (i) only with the written permission of the CAA, (ii) under the supervision of the pilot and (iii) fully comply with national and international regulations. "(Official newspaper of the Republic of Kosovo, 2008).

Whereas under Article 59 of Law no. 03 / L-051 on Civil Aviation, “Other dangerous goods, such as harmful or poisonous gases, nuclear fuel, and radioactive materials may only be transported (i) with the written permission of the CAA, and (ii) following the conditions laid down by the CAA in the regulations implementing this law, which shall take into account existing international rules and regulations in this field."(Official newspaper of the Republic of Kosovo, 2008). During the interview with Mr. Seferi in our question we were interested to know if we have any warehouse for dangerous goods in PIA, do you think there would be new airlines (cargo)? Mr. Seferi said "I think at the moment this is what we have, we don't have any particular warehouse but it depends on the future if there will be any factory which might produce these materials and our airport will expand by exporting them in foreign countries. “The questionnaire is a well-established tool within social science research for acquiring information on participant social characteristics, present and past behaviours, standards of behaviour or attitudes and their beliefs and reasons for acting to the topic under investigation (Bulmer, 2004). "(D. K. Bird, 2009). During the data analysis, we conclude that the gender who did not hesitate in completing this survey is female’s gender, where out of one hundred (100) respondents, 71% are females and 29% of the respondents are male. Regarding the age group, they mainly belong to the first age group of 20 to 35 years old, with a percentage of 66%. In the below, we have created a table with some of the main important questions of this research.
Table 3: Questionnaire with 100 PIA employees

<table>
<thead>
<tr>
<th>Some of the questions</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are some of the main dangerous goods during air transportation?</td>
<td>Explosives, toxic substances, infectious substances, corrosive and flammable liquids.</td>
</tr>
<tr>
<td>Is the risk higher for solid goods or liquid goods?</td>
<td>Both of these goods are at high risk.</td>
</tr>
<tr>
<td>Is it important to check the goods before shipping?</td>
<td>Yes.</td>
</tr>
<tr>
<td>Before shipping the goods does a package need to be labelled and marked inside and outside the box?</td>
<td>Yes.</td>
</tr>
<tr>
<td>Does PIA should have a warehouse for dangerous goods near to the Airport or inside of it?</td>
<td>Yes, it should have a warehouse near the Airport.</td>
</tr>
<tr>
<td>Is it important to train all the airport staff for dangerous goods?</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

Source: Author’s work

A very important element is the professionalism of people who will be willing to work with these goods. Moreover, Pristina International Airport does have a training department from which staff have the chance to be trained. So, there are a trained staff who have daily access to various goods that carry dangerous goods and who need to know how to load them on the aircraft and in what orientation to place them, always following the labels placed in packages. "The PIA Training Centre" Adem Jashari "currently offers more than 30 professional courses including training on dangerous goods, and all are in compliance with the requirements of IATA, ICAO, ISAGO and approved by the Civil Aviation Authority of Kosovo." (Limak Kosovo, 2018). Training and awareness are required for the staff of operators and agencies acting on behalf of operators performing handling functions, check-in service, and security staff flight crew members, flight attendants (flight attendants), etc. Concerning for updating the training on dangerous goods, this training should be held every 24 months so that all workers are aware if in the meantime might happen any changes in the regulation of dangerous goods by aviation experts.
5. Conclusion and Recommendations

While Kosovo’s flights are increasing and there is economic development, it is very important to build a warehouse and store dangerous goods which may develop the increase of new business. This paper aims to raise the awareness of competent persons in constructing a warehouse of landfills for dangerous goods in PIA. The importance of this paper is to present the current situation in the Airport in terms of air transportation and having enough space for the storage of dangerous goods. The questionnaire helped us to enrich our research as much as possible and to get acquainted with the workers who are part of PIA’s. During the data analysis, we found that 45.92% of the respondents stated that it is important to have a dedicated warehouse for dangerous goods, regardless of whether the location is inside or outside the airport. Therefore, the construction of a warehouse for these goods will affect the reduction of airport operating costs and the creation of new agreements with international airlines. Finally, it facilitates the work of local businesses in terms of importing and exporting dangerous goods while opening new jobs for young generations. The current staffs at Pristina International Airport are professional and their refresh training is made from the LKIA training centre which means that there will be no expenses.

List of References


