Railway between China and EU - challenges for Transport Police

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Abstract: *This article aims to create awareness about the challenges related to the improved rail connection, both in terms of travel time and reliability, between China and Europe that Transport Police have to face in terms of criminality. The number of freight trains and the volume of loads transported from Asia to Europe are growing continuously, generating risks for the security of the European Union member states produced by the criminal groups or individuals looking to seize the chance to smuggle illicit commodities. Addressed not only to the law enforcement agencies, but in the same time to the railway companies and their employees, this editorial is intended to raise a question mark in the context of feeble balance of economic interest in report with the needs for security - from social, financial and health point of view - of the European Union member states.*

Keywords: *railway; railway infrastructure; criminality; smuggling; transport police.*
Framing subdomain: Criminal Law

Introduction

The improved railway connection is a positive change in the transportation infrastructure, as the transport of legal goods offers considerable economic benefits. However, changes in well-developed transportation and logistics infrastructure moving people and goods on railway lines across the European and Asian continents offers a large volume of opportunities for the criminals and the organized crime within railway transport system. As new key global infrastructure hubs will emerge, the criminals seeking occasions to smuggle tobacco, drugs, firearms, counterfeited goods, illicit waste, or protected species can be expected to exploit the chances offered by these new transport routes and new key global infrastructure hubs. Raw material, components, and precursors are particularly likely to be smuggled, given the technological possibilities for finalizing products closer to consumer markets [1]. In addition, it is foreseen that the nature of the criminal associations is likely to be affected by the transcontinental rail service. Infiltration in the transportation and logistics systems requires the recruitment of specialists that are familiar with it, which may lead to cooperation between unlawful groups and employees of transport companies or operators - considering criminality as a business. Therefore, the response of railway staff and law enforcement personnel is of outmost importance in fighting the process of smuggling illicit commodities.

The article provides background information on the New "Silk Road" - as the new railway line between China and Europe is called - presenting the reasons that China supports the initiative and describes the new transport option for freight transport compared to sea and air transport. Another objective of this article is to present the current developments of the rail freight sector, to optimize the rail traffic routes from China to Europe, mainly focusing on the interconnecting EU border railway crossing points and providing at the same time information on the evolution of rail freight within the last years. Its ultimate scope is the analysis of opportunities for criminals or criminal associations brought by the change in the railway infrastructure and the consequent increase in freight trains arriving from China to the EU, including the identification of risk factors and indicators for the exploitation of the rail freight transport routes and cargos by the organized criminal groups. Furthermore, the new change has created new challenges for law enforcement authorities within the railway transport system and this article tries to ascertain some recommendations for the benefit of the railway police officers.

***Sources on selected topic*.** The data for this article consists of open source intelligence covering a period of about ten years in length, while development process of the railway infrastructure continues. Furthermore, Customs Liaison Officers at Europol from Romania, Poland, Czech Republic, and The Netherlands provided their input during unstructured interviews.

In addition, information reported to Europol in relation to seizures of illicit commodities on trains originated or with destination China and the intermediate transit countries was collected.

The current article aims to support the intelligence sharing and the analytical activities of transport police leading to operational activities concerning tobacco fraud [2]. Also, the expertise brought by the important stakeholders such as the European Association of Railway Police Forces (RAILPOL) [3] and the Customs Eastern and South-Eastern Land Border Expert Team (CELBET) [4] is strengthening and improving the operational co-operation at the external borders of the EU, an example in this direction being the Analysis Project "SMOKE" [5] and the Situation Report on Counterfeiting and Piracy in the European Union EUROPOL&EUIPO, *2017* [6].

Another source of information is represented by the participation of the Romanian Transport Police representatives within "LANDSEC" - the permanent group of experts on land security domain - constituted at DG MOVE [7] from European Commission, which generated experience and good practices in the process of analyzing the security challenges posed by the railway link between China and EU.

The information included in this article was collaborated with experts from the above mentioned stakeholder groups given the fact that open sources were used in many instances.

1. The New "Silk Road" – railroad connecting China and Europe

The Silk Road Economic Belt renaissance has become one of the biggest infrastructural, economical and political developments happening in the world [8]. Cargo trains are now connecting an ever-increasing number of cities in China and Europe, with route options that are diverse, improved in performance, and based on updated customs protocols [9]. The entire network is subsidized by the Chinese government, a vanguard initiative which managed to transform a long 40 days trip from China to Europe with incomplete rail lines and inadequate cargo volume into a 15 to 20 days journey with direct connections to major European cities [10].

China seeks to demonstrate the viability of a trans-continental service and the number of trains running and the volume of freight carried is growing rapidly [11]. China aims to resurrect the historic trade of the old Chinese silk caravans carrying goods to Europe by using rail power and creating direct transcontinental rail routes [12]. The rail expansion is part of China's Trade policy, the "One Belt, One Road (OBOR)" initiative [13], and part of the effort to sustain the country's economic growth [14].

The new and improved railway infrastructure is aimed at reinforcing Chinese inland cities, mainly those in the western part of the country that have become manufacturing epicenters. The reason is that it is impractical to first move the products eastwards across the country, than to be loaded on ships and afterwards transferred to Europe. Moreover, the fast delivery option supported by the rail transport solution is more preferable for high value added to Chinese products that demands quick delivery.

The other direction of the route, from the EU to China, is also operating and there is a growing market in China for European luxury goods and some categories of sensitive goods. EU exports include machinery, transport equipment and vehicles. However, the amount of goods exported from the EU to China is much lower than the amount of goods going from China to the EU [15].

2. A highly supported initiative as a diverse and fast transport solution

Nearly half of the EU imports come from China, while China is the second biggest market for EU exports [16]. Shipping, transport, and logistics companies explore the possible opportunities of the new rail connections as supplementary to the existing sea and air routes. The increasing demand for consumer goods plus the multiplication of the European rail freight routes over the last decade raise the opportunities for further growth of China's railway container sector [17]. Research reveals that there is an increase in destinations to 15 in Europe and more than 16 in China [18]. Freight trains from China travel to several European cities: Duisburg and Hamburg in Germany, London in the UK, Lyon in France, Madrid in Spain, Amsterdam and Rotterdam in The Netherlands, Lodz and Warsaw in Poland, Zeebrugge in Belgium, Bratislava in Slovakia, Naples in Italy, Hallberg in Sweden, Prague in Czech Republic.

Before the revival of the "Silk Road" rail connection, the preferable choice for intercontinental transport between China and Europe was either sea transport, which is slow but cheap, or air carrier, which is fast but expensive. The new Eurasian rail connection offers the possibility to transport goods in approximately

two weeks for 50% of the costs of air transport. Although rail transport cannot compete with the volume of cargo and the prices offered by sea transport, or with the short amount of air transportation time, it still is a cost and time effective compromise for a market which is highly engaged by shipping companies.

For the analysis of the different costs of transport, there were randomly selected three Chinese provinces and DHL provided an estimation of possible costs for the transfer of one container from these provinces to Duisburg /Germany.

In the table below, the averages are illustrated as indicators of the transport costs by ocean freight, rail cargo and air cargo [19]:

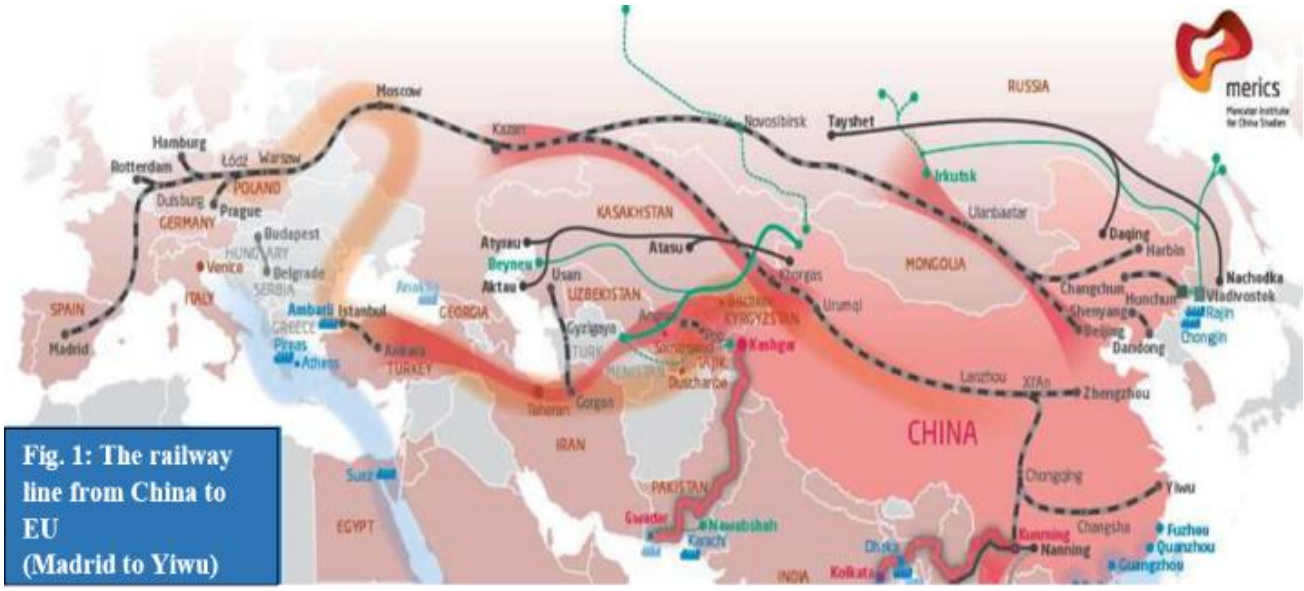
DHL numbers	**Ocean freight (door to door)**	**Rail Cargo**	**Air Cargo to Frankfurt airport, Price/kilo***
Chinese province - Duisburg	1072€	5000€	3.30 €/kg

**The maximum payload mass for a 20" container is approximately 22 tones but in each case the weight depends on the kind of cargo.*

(Source: https://www.dpdhl.com/en/trends-in-logistics/global-trade.html)

Transporting goods by train takes about a quarter of the total amount of time necessary for the transport by sea. This leads to attraction towards railroad of a portion of sea freight transportation.

It is not expected that rail transport will seriously affect sea transport, since a 50 container-wagons train is not going to compete financially with a ship carrying 11.000 containers. The impact on the air cargo industry is expected to be higher, based on the relatively short travel time to European cities.



Source: MERICS - Mercator Institute for China Studies

Additional information. - A train trip from China to the EU takes about 15 to 19 days [20]; - Hewlett Packard is regarded as the pioneer of the very first China-Europe freight train, sending laptops and LCD monitors from Chongqing/China to Duisburg/Germany in 2011; - The freight transport route from Madrid to Yiwu in China is over 13.000 kilometers in length, making it the longest in the world. Transporting freight on this route is twice as quick as transporting freight by ship [21]; - The long freight railway route from Yiwu to London (12.000 km in length) started operating for the first time in February 2017. It takes 18 days to complete and made London the 15th European city to be added to the expanding rail map representing connections with China [22].

3. Developments of the rail sector

3.1 ***Developments of the rail sector in the EU.*** The EU acknowledged the increase in cargo traffic between Asia and Europe in the last two decades and the need to improve the competitiveness and quality of rail transport along the former Silk Road trading routes. Therefore, it has given priority to freight in the development of its rail network, through the realization of a number of international freight-oriented „corridors". Rail transport is foreseen to play a new, broader role in global transport markets for several reasons, including environmental benefits. Therefore the EU has adopted legislation that promotes common technical specifications for railroad infrastructure and common approaches to safety.

One of the developments in EU level is the establishment of the European Union Agency for Railways (ERA) [23], that has been set up with the aim to contribute on technical matters of the implementation of EU legislation in the rail sector. Another initiative is the European Rail Traffic Management System (ERTMS) [24], which facilitates an interoperable railway system within Europe. The actors responsible for rail management are the Rail Infrastructure Managers. At national level they possess information on rail transport services, number of trains arriving, time schedules and are also the responsible factors that takes decisions during major disturbances and incidents within railway transports system. At EU level they are members of the European Rail Infrastructure Managers Association [25] and support an opened and continuous European rail network, upholding a safe and sustainable transport system.

There are efforts to improve interoperability within the European rail sector and encourage developments for rail transport and passengers safety, although there are limited references to criminality or the possibilities that rail transport can be exploited by criminals or criminal groups for the smuggling of illicit goods.

3.2 ***Rail Traffic Routes from China to the EU.*** The main Eurasian rail freight paths are starting from China to the EU via Kazakhstan, or trough Russia - by the Trans-Siberian Route. These two routes are the fastest and offers sufficient transport capacity. In addition, China, Iran and Turkey are investing in and building the Southern infrastructure links to Europe along the former Silk Road trading routes, in a development that emphasize their main objective: providing alternative routes for future business.

On the European side, the (EU) Regulation No 913/2010 defines the European Rail Freight Corridors (RFCs) [26]. The connecting points of Eurasian routes with the European Freight Corridors are the following interconnection points of routes from Asia to the European RFCs:

- Malaszewicze/Poland-Brest/Belarus (RFC 8: North Sea - Baltic, length 6000 km, crossing EU countries: Belgium, Netherlands, Germany, Czech Republic, Poland and Latvia);

- Cierna/Slovakia - Chop/Ukraine (RFC 9: Rhine Danube, length 970 km, crossing EU countries: Czech Republic, Slovakia) and Zahony/Hungary - Chop/Ukraine (RFC 6: Mediterranean, length 7000 km, crossing EU countries: Spain, France, Italy, Slovenia, Croatia and Hungary);

- Svilengrad/Bulgaria - Kapikule/ Turkey (RFC 7: Orient - East Mediterana, length 7700 km, crossing EU countries: Czech Republic, Austria, Hungary, Romania, Greece, Bulgaria and Slovakia);

- Via Stockholm /Sweden (RFC 3: Scandinavian - Mediterranean, 7000km length, crossing EU countries: Spain, France, Italy, Slovenia, Croatia and Hungary) [27].

The entry point into the EU with the highest interconnection traffic is the border rail crossing terminal of Malaszewicze/Brest, due to its strategic location between Moscow and Central European distribution hubs in Duisburg and Hamburg (Germany). The use of the Baltic corridor via Lithuania (RFC 8) is expected to increase for Chinese cargo due to an agreement between Lithuanian Railways and Eurasian Rail Alliance (UTLC United Transport and Logistics Company - Eurasian Rail Alliance) [28]. At the Orient - East Mediterranean route (RFC 7) changes are also foreseen. Greece is planning the enhancement of its rail network infrastructure, so the goods arriving from China to the Piraeus Port/Greece to be transferred through Orient - East Mediterranean rail route to southern, eastern and central Europe. Traffic on the interconnecting points with Ukraine will depend on the political situation in this country. Considering these developments, law enforcement authorities at the border rail crossing points need to evaluate their capacity in human resources, expertise and equipment.

Fig. 2: The China-Europe Block Train
(Source: https://www.sino-shipping.com/country-guides/shipping-from-china-to-france/)

3.3 ***Frequency and Volume of the rail traffic between China and the EU.*** The freight rail service between China and Europe has become regular and is foreseen that trains will be multiplied in the years to come. Between several city-pairs, the trains run quite a lot of times per week and frequency is reaching close to daily some periods of the year, in important and busy routes [29]. The volume of containers loaded on the trains varies - with references to trains – the approximate number being 41 containers [30].

The following facts indicate the increase in rail traffic:

- Rail freight transport between Asia and Europe grew from 300 trains in 2014 to nearly 1800 trains 2016, while the transport cargo volume grew 580% [31].
- Every day, five to six trains cross the border railway crossing point Malaszewicze, at the border between Poland and Belarus. This means that more than 200 containers arrive every day [32].
- In the first quarter of 2015, Customs Branch Office in railway crossing point Malasewicze, received 2557 containers from China as subjects for Customs clearance. In the first quarter of 2018 it received 15420 containers which mean an increase of 603% in only three years [33].
- In 5 years' time (2011-2016), the number of scheduled freight trains from China arriving at Duisburg terminals in Germany has increased from one train per week to eight trains per week [34].
- In June 2017 the first train with finished vehicles from China set off for Zeebrugge in Belgium. The trip lasted less than 20 days, passing through Russia, Belarus, Poland, and Germany. The vehicles were transported in custom made containers. Swedish car manufacturer VOLVO supported the expansion of rail links between China and Europe with a route that carries up to 200 vehicles between China and Zeebrugge multiple times a week [35].
- The train from Wuhan to Lyon runs three times per week with one weekly return.

The term "direct routes" from Chinese provinces to European cities is not precisely reflecting the reality. The fact is that only containers travel across continents, trains do not. The track gauges of former Soviet countries are different from those in China and Western Europe, so one train physically cannot travel the entire route. There are two breaks of gauge:

- From standard gauge in China to Russian Gauge in Kazakhstan. This transfer can be done in less than an hour.
- Back to standard gauge when crossing from Belarus into Poland.

These cargo relays are generally very simple procedures: the incoming train and the outgoing train are lined up side by side and a crane moves the containers from one train onto the other [36].

4. Affected crime areas

4.1. ***Excise Fraud.*** China is involved in many organized crime areas that affect the EU member states. China is one of the main source countries for illicit tobacco products trafficked to EU [37] and has become the world's largest supplier of counterfeit cigarettes, producing roughly 200 billion sticks annually [38]. Underground factories in China manufacture billions of counterfeit cigarettes of low quality. The majority of filter rods used in the illegal manufacturing of cigarettes originate from China [39]. Illicit cigarettes are an

"attractive" commodity to smuggle: light weight and easy to transport with high sales value and consistent consumer demand. Illicit cigarette trade also carries a relatively low detection risk and mild sanctions. International criminal organizations smuggle counterfeit cigarette compartments and tobacco in separate shipments from China which are intended to be assembled within the EU [40].

A study published by the Centre for the Study of Democracy (CSD) indicates that trafficking of cigarettes has become one of the main drivers of corruption along the EU's Eastern land borders [41]. Most freight trains from China enter the EU in Poland, coming via Belarus. Seizures performed by the authorities of the member states reveal that cigarettes made in Belarus with Belarusian excise stamps are smuggled by breaking into the containers and concealing the cigarettes among the declared goods [42]. Tobacco products have been found in the structure of wagons, in empty wagons, or implanted in the legal cargo. In certain cases, the cargo spaces had been adapted and additional walls installed to provide extra concealment points [43].

Large seizures of excise goods (both in terms of the average amount seized and the largest individual cases) were reported to FRONTEX at the border between Poland and Ukraine, where most illicit goods were uncovered hidden in cargo trains. In the majority of cases, illicit cigarettes were usually hidden in or under loads of coal, wood, potash fertilizers or in lockers built under the platform of the wagon [44]. From Belarus, cigarettes are imported to Latvia mainly hidden in train wagons concealed in hoper-wagons with artificial fertilizers or grain, under cisterns of the trains but also in other products used to cover the illicit cargo. When freight trains cross the Latvian borders from the East, coming from Belarus, tobacco products and also oil products are thrown out of trains in specific points indicated in advance, close to the borders and then other members of the group collect the illicit goods and transport them by vehicles further in the territory of the Latvia.

The illicit activity is most likely supported by train crew, engine-drivers and their assistants [45]. Seizures of parcels carried by freight trains have taken place in Lithuania. Contraband cigarettes are hidden in the locomotives of freight trains and in open wagons [46]. Cases reported to Europol reveal that in the past years smuggled cigarettes have been seized in Hungary, Latvia and Poland [47]. Intelligence indicates that the shipments arrives by train, with intermediate stops in Belarus and Ukraine. The cigarettes had mainly Belarusian, but also Russian and Polish tax stamps. There are categories of shipments that due to their density and malleability are preferred to conceal smuggled goods. A popular concealment product during the period 2015 - 2017 was wood [48]. Other times the cigarettes were concealed in freights of coal, in bricks, in tanks wagons, within bags of cement, in small gas tanks and in sodium bicarbonate cargos. In one case there were indications that the cigarettes were placed during transportation, although it is unclear where and when exactly the placement occurred.

Different types of hiding places and methods of smuggling have been identified in railway wagons. Experiences show that one of the biggest challenges is cigarette smuggling in high density bulk cargoes, or in tanks, or beneath wagons [49].

In the area of oil products smuggling [50], criminals have been identified carrying important quantities of such excisable goods into the EU by train and avoiding millions of VAT. The scheme used trains mainly originated from Russia and/or Belarus to the Eastern EU countries, such as Lithuania and Latvia. The fuel was transported by rail to tax warehouses [51] where the fuel used to be placed in tanks and then was reloaded into vehicles that mostly often went to Polish excise warehouses and then to Poland where they switch to road transport. In order to avoid VAT, the smugglers are selling fuel on the local market, using "missing trader" fraud schemes [52].

4.2. ***Counterfeit goods.*** The increased use of rail transport between China and the EU could provide an opportunity for the infringers in the area of Intellectual Property Crime (IPC). European Union Intellectual Property Office (EUIPO) considers that trains may become more frequently used in the future in terms of new transport methods [53]. The EUIPO estimates that there is a new threat for IPC landscape and raises specific concerns regarding the opportunities for criminal networks. Counterfeiters often need to produce and ship products quickly, usually in reaction to emerging product trends and demands in their chosen marketplace. Such goods are frequently cheap at the point of sale and the use of air freight, despite being fast, is often too expensive. The average shipping container can take up to 6 weeks and, although maritime transport still appears to be the preferred means of transporting bulk shipments, largely because it is the most economic option, the time delay incurred could impede a fast route to market for certain IPR infringing goods.

By adding to this the number of EU destinations that are now directly served and the potential opportunity to offload infringing goods on route, then the very low number of rail-borne seizures reported at the external borders to date appears somewhat discordant. As rail freight services between the EU and China become more numerous and efficient, and China develops its "Belt and Road" transport infrastructure, which is planned for the coming years, it is thought likely that increasing numbers of IPR-infringing consignments

may arrive at the eastern EU external borders by train from where, if they are not intercepted, they could then travel throughout Europe. Therefore, such rail connections could offer concrete advantages to international IPR-infringing criminal networks and should be kept on the radar [54].

4.3. ***Other Crime Areas.*** China is a major source country for Fentanyl [55] and various substitutes which are sold online. Although no actual cases have been reported, the opportunity for the criminals and criminal organizations is emerging. In addition, trains with perishable products can be used to cover up cannabis loaded on trains [56].

5. Empty cargo - risks and vulnerabilities

Europe's reliance on cheap Chinese products generates a trade imbalance between the EU and China. As a result, it is estimated that 60 to 70 percent of rail shipments are westbound. On eastbound trips it is therefore not uncommon for containers to be empty, while the remaining containers are sent back by sea. The question is whether criminals or criminal organizations could benefit from these empty containers in rail transport.

Analyzing information contributed to Europol in the area of motor vehicle crime, it appears that outbound trains have been used to transfer vehicles stolen in several Eastern European countries. These were transferred in vehicle transportation wagons leaving Europe through Lithuania and Latvia, via Uzbekistan, with destination Tajikistan [57].

During a cross border operation supported by Europol, at least two stolen vehicles were seized on the same train from Latvia with destination Dushanbe, Tajikistan [58]. In 2015, Latvian authorities identified four stolen vehicles in a freight train with destination Tajikistan. Visual inspection of freight train wagons with passenger cars revealed differences between documentation and reality (different vehicle model, color and year of manufacture) [59].

In wildlife trafficking, eels are in high demand in Asia; criminal networks smuggle them from Europe to China by land and air. This phenomenon is highly lucrative for Asian criminal networks and the Eurasian rail network could be a potential modus operandi for this type of crime [60].

6. Law Enforcement within railway transport – new challenges

The increased number of trains arriving in the EU and the consequent risk of smuggling of illicit goods raises the issue of the control capacity at the railway border crossing points, in the train stations and marshalling yards. Research indicates that most trains from China enter the EU at the railway crossing point of Malaszewicze in Poland, although trains are also controlled at the railway crossing points of Braniewo, Kuznica, and Siemianowka in Poland. The control equipment varies at each rail control point. In Malaszewicze, there is a stationary X-ray equipment and good infrastructure. The launch of the X-Ray scanner, in January 2017, had a significant impact on the smuggling of large batches of cigarettes in rail freight traffic on the Belarusian - Polish border [61]. At the other rail crossing points there are either limited control capabilities or no special control infrastructure at all. Controls are mostly carried out with portable X-ray devices, sniffer dogs, video endoscopes, smuggling detectors, metal identifiers, and mirrors.

Information provided by the Customs Eastern and South-Eastern Land Border Expert Team [62]. (CELBET) indicates that the X-Ray scanner equipment is available in Zahony – Eperjeske/Hungary. There is no railway scanner available in the other railway interconnection points from Asia to the EU borders which would be necessary in particular for Cierna/Slovakia and Svilengrad/Bulgaria.

The physical checks of whole rail cargo are very difficult or impossible, so deploying rail scanner makes a great importance. Special attention has to be drawn on suitable detection technology given the tendency of smugglers to innovate in concealment and follow the technical capabilities of the law enforcement agencies, like railway police for example. Moreover, the available equipment is one factor that could affect the efficiency of controls at the EU borders. It needs to be taken into consideration that physical checks are necessary in the case of counterfeit goods since the use of the scanner equipment might not be efficient. Another factor that needs to be taken into account is the personnel expertise on cargo train checking and the knowledge for use of control equipment.

The railway police have limited access to information on the number of trains arriving at the railway crossing points, the volume of the containers, the time schedule, and the goods and products they carry. Only dangerous shipments are declared in advance.

The digitalization of rail transport through the application of computerized systems would be a major improvement. These systems should indicate: - the number of trains and their time schedule; - the number of

containers carried by each train; - the category of goods transferred; - the weight of the cargo; - destination; - the intermediate locations of container transshipments.

These are all risk indicators that can be used for monitoring the activity of criminals or criminal organizations and analyzing these elements could lead to intelligence led operations. Subsequently, proper intelligence and targeted operations would give information related to further developments within the private or public sector of railway transport systems.

Conclusions

Railway freight transport has become more competitive in terms of cost and speed and the development of the new "Silk Road" will further increase the volume of rail freight traffic.

These developments are supported by both China and the EU.

The increase in the volume of rail freight traffic brings with it an increased risk of smuggling activities. The topography of interconnecting railway crossing points and the large number of transshipment terminals raises the chance of criminal exploitation. There are opportunities for criminals or criminal organizations to infiltrate the cargo trains with innovative concealment methods. The smugglers might exploit the lack of digitalization of rail transport services and limited control capacities in terms of equipment and specialized control personnel. The criminal organizations might also try to infiltrate existing or future logistical and transportation digital systems with the recruitment of railway management and law enforcement personnel, raising the risk of corruption and abuse of legal structures.

In conclusion, the change in the railway infrastructure and the subsequent increase of rail freight traffic between China and the EU proved to be a real challenge for the law enforcement agencies and subsequently, the railway transport police.

To address the potential threat from the increased railway freight traffic between China and the EU, law enforcement authorities should direct their research on improving intelligence sharing and inter-agency cooperation. Also, the information on rail traffic, that can be provided by the railway companies or operators (time, frequency, volume and kind of goods), on trains entering the EU and trains arriving at the main train transport hubs in EU cities, would be an important tool in developing action plans aimed to fight criminality.

Identifying new modus operandi by ascertaining gaps within functionality of the rail freight traffic and enhancement of the information exchange between transport police and the railway companies/operators can be useful for recognizing vulnerabilities and producing risk assessments.

The findings resulted from such examinations can bring together experts (like RAILPOL, COLPOFER, LANDSEC etc.) on the relevant crime areas (such as excise fraud, VAT fraud, counterfeited goods, auto theft, environmental crime, money laundering, etc) that can elaborate strategic analysis useful to the law enforcement agencies and relevant organizations with tasks within safety and security of railway cargo transports.

References

[1] Europol, Exploring tomorrow's organized crime, "Travel into the future of crime" European Police Office 2015, p.17https://www.europol.europa.eu/publications-documents/exploringtomorrow%E2%80%99s-organised-crime.

[2] In 2010 the European Union set up a four-year Policy Cycle to ensure greater continuity in the fight against serious international and organized crime. In 2017 the Council of the EU decided to continue the EU Policy Cycle for the 2018 - 2021 period. It aims to tackle the most significant threats posed by organized and serious international crime to the EU. This is achieved by improving and strengthening cooperation between the relevant services of EU Member States, institutions and agencies, as well as non-EU countries and organizations, including the private sector where relevant, https://www.europol.europa.eu/empact.

[3] https://www.railpol.eu/site/home.

[4] https://ec.europa.eu/taxation_customs/expert-teams-europa_en.

[5] The purpose of Analysis Project (AP) SMOKE is to prevent and combat the activities of organized crime networks engaged in the unlawful manufacturing and /or smuggling of excise goods, in the Member States or the European Union as well as any associated criminal activities within Europol's mandate uncovered in the course of the investigation into these criminal networks, https://ec.europa.eu/anti-fraud/public-perception-illicit-tobacco-trade_en.

[6] https://www.europol.europa.eu/publications-documents/2017-situation-report-counterfeiting -and-piracy-in-european-union.

[7] General Directorate for Mobility and Transport, https://ec.europa.eu/info/departments/mobility-and-transport_en.

[8] Shepard, W., Trains Are The New Pandas: The Real Impact That The New China - Uk Rail Line Will Have, Forbes, 2017, https://www.forbes.com/sites/wadeshepard/2017/01/06/the-story-behind-the-new-china-to-uk-train/#32bace1e261b.

[9] Shepard, W., Why The China-Europe "Silk Road - Rail Network is growing fast", Forbes, 2016, https://www.forbes.com/sites/wadeshepard/2016/01/28/why-china-europe-silk-road-rail-transport-is-growing-fast/#45e1185c659a.

[10] Shepard, W., Trains Are The New Pandas: The Real Impact That The New China - Uk Rail Line Will Have, Forbes, 2017, https://www.forbes.com/sites/wadeshepard/2017/01/06/the-story-behind-the-new-china-to-uk-train/#32bace1e261b.

[11] Kemp, J., China develops continent - spanning railroad to Europe, Reuters, 2016, https://www.reuters.com/article/us-china-railwaykemp/china-develops-continent-spanning-railroad-to-europe-kemp-idUSKCN0X41U7.

[12] Webb, J., The New Silk Road: China Launches Beijing-London Freight Train Route, Forbes, 2017, https://www.forbes.com/sites/jwebb/2017/01/03/the-new-silk-road-china-launches-beijing-london-freight-train-route/#41f923d61f13.

[13] The "One Road "refers to road and rail connections primarily focused on Central Asia as a route to Europe, the "one Belt" refers to the sea and harbor development Source : Buranelli, F.C., Why China's $1 trillion new Silk Road plan is being greeted coolly by the West, The conversation, 2017, https://theconversation.com/why-chinas-1-trillion-new-silk-road-plan-is-being-greeted-coolly-by-the-west-75722.

[14] Josephs J., All aboard the China - to - London freight train, BBC, 2017, https://www.bbc.com/news/business-38654176.

[15] Central Bureau of Statistics, What does China buy from us and our neighbors, CBS Netherlands, 2017, https://www.cbs.nl/engb/background/2017/10/what-does-china-buy-from-us-and-our-neighbours.

[16] Shepard, W., Why The China-Europe "Silk Road" Rail Network is growing Fast, Forbes, 2016, https://www.forbes.com/sites/wadeshepard/2016/01/28/why-china-europe-silk-road-rail-transport-is-growing-fast/#45e1185c659a.

[17] Josephs J., All aboard the China - to - London freight train, BBC, 2017, https://www.bbc.com/news/business-38654176.

[18] UIC, International Union of Railways, STUDY Eurasian rail corridors: "What opportunities for freight stakeholders?", UIC, 2017, https://uic.org/eurasian-rail-corridors.

[19] DPDHL numbers: Ocean Freight, Rail Cargo, Air Cargo, Deutsche Post DHL Group, Deutsche Post AG; Bonn; Registered office Bonn, https://www.dpdhl.com/en/trends-in-logistics/global-trade.html.

[20] Thomas-Peder Jensen, Tschudi Logistics Denmark: „Rail transport between China and Europe – speed and cost competitive", https://tschudilogistics.com/rail-transport-china-cis-europe/.

[21] Yiwu-Madrid railway line – Wikipedia, https://en.m.wikipedia.org/wiki/Yiwu%E2%80%93Madrid_railway_line.

[22] Yiwu-London railway line – Wikipedia, https://en.m.wikipedia.org/wiki/Yiwu%E2%80%93London_railway_line.

[23] https://www.era.europa.eu/.

[24] https://www.ec.europa.eu/transport/modes/rail/ertms_en/.

[25] https://www.eimrail.org/.

[26] http://www.rne.eu/rail-freight-corridors/rail-freight-corridors-general-information/.

[27] UIC, International Union of Railways, STUDY Eurasian rail corridors, "What opportunities for freight stakeholders?" UIC, 2017, https://uic.org/eurasian-rail-corridors.

[28] Joint stock company „United Transport and Logistics Company – Eurasian Rail Alliance" (JSC UTLC ERA) provides services for transportation of containers by regular container block trains on the route China-Europe-China through the territories of the republic of Kazakhstan, the Russian Federation and the Republic of Belarus,https://www.utlc.com/en/.

[29] Kemp, J., China develops continent - spanning railroad to Europe, Reuters, 2016,https://www.reuters.com/article/us-china-railway-kemp/chinadevelops-continent-spanning-railroad-to-europe-kemp-idUSKCN0X41U7.

[30] Pieriegud Jana, "Analysis of the potential of the development of rail container transport market in Poland" point 3.2: Rail container transport between China and Europe, pp. 59-60, February 2019, European Commission, Directorate-General for regional and Urban Policy, Directorate F – Closure, Major Projects and Programs Implementation III.

[31] http://www.rne.eu/rail-freight-corridors/rail-freight-corridors-general-information/.

[32] Pieriegud Jana, "Analysis of the potential of the development of rail container transport market in Poland", point 3.2: Rail container transport between China and Europe, pp. 60-61, February 2019, European Commission, Directorate-General for regional and Urban Policy, Directorate F – Closure, Major Projects and Programs Implementation III.

[33] Pieriegud Jana, "Analysis of the potential of the development of rail container transport market in Poland", point 3.2: Rail container transport between China and Europe, pp. 61-63, February 2019, European Commission, Directorate-General for regional and Urban Policy, Directorate F – Closure, Major Projects and Programs Implementation III.

[34] Xi, L., Zhiqiang, T., Feng, Y., Feature: China-Europe freight trains ring vitality to ancient Silk Road, Xinhauanet, 2016, http://www.xinhuanet.com/english/2016-07/23/c_135533595.htm.

[35] Michael Torfs, Volvo sending first cars to China by train: "Cut transport times by half", vrtNWS Economy 04/07/2019,https://WWW.vrt.be/vrtnws/en/2019/07/04/volvo-sends-first-cars-to-china-by-train/.

[36] Shepard, W., Why the China-Europe "Silk Road" Rail Network is growing Fast, Forbes, 2016,https://www.forbes.com/sites/wadeshepard/2016/01/28/why-china-europe-silk-road-rail-transport-is-growing-fast/#45e1185c659a.

[37] Klaus von Lampe, Main K. Kurti, Anqi Shen and Georgios A. Antonopoulos, The Changing Role of China in the Global Illegal Cigarette Trade, International Criminal Justice Review 22(1), 2012, pp.43-60.

[38] Tobacco Underground, the International Consortium of Investigative Journalist (ICIJ), Cigarette Smuggling Still Booming, https://www.articleingproject.net/underground/index.php?option=com_content&view=article&id =5.

[39] Klaus von Lampe, Main K. Kurti, Anqi Shen and Georgios A. Antonopoulos, The Changing Role of China in the Global Illegal Cigarette Trade, International Criminal Justice Review 22(1), 2012, pp.60-67.

[40] KPMG, Project SUN: A study on the illicit cigarette market in the EU, Norway and Switzerland, 2016, p. 28.

[41] Center for the Study of Democracy (CSD), Anti-Corruption Measures in EU Border Control, 2012, pp. 46-47.

[42] RAILPOL contribution for the current article through the meetings of the Working Group "Criminality and Illegal Migration".

[43] World Custom Organization, Illicit Trade Article 2016, p. 201,http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-andcompliance/activities-and-programmes/illicit-trade-article/itr-2016-en.pdf?la=en.

[44] RAILPOL information (A/N).

[45] RAILPOL information (A/N).

[46] RAILPOL information (A/N).

[47] Europol information, Secure Information Exchange Network Application SIENA 1224581, 1047032, 1072449, 1242029, 1242764, 1245739, 1217737, 1224441, 1113196

[48] https://www.politiadefrontiera.ro/ro/main/i-contrabanda-cu-tigari-fenomen-aflat-in-atentia-politiei-de-frontiera-romana-8810.html.

[49] General Inspectorate of the Romanian Police, Transport Police Directorate – "Analysis of the Action Plan for prevention and fight against smuggling of tobacco products at the northern and eastern borders of Romania" (A/N).

[50] Gasoline, diesel as excisable goods (A/N).

[51] An excise warehouse is any place of security approved by state where goods liable for excise duty can be stored without payment of the duty for such periods and subject to such conditions as they see fit https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/general-overview/common-provisions_en.

[52] https://www.europol.europa.eu/crime-areas/economic-crime/mtic-missing-trader-intra-community-fraud.

[53] OECD/EUIPO (2017), Mapping the real routes of trade in fake goods, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264278349-en.

[54] Situation Report on Counterfeiting and Piracy in the European Union EUROPOL &EUIPO, 2017,https://www.europol.europa.eu/publications-documents/2017-situation-report-counterfeiting-and-piracy-in-european-union.

[55] Fentanyl is an opioid used as a pain medication and together with other medications for anesthesia,https://en.m.wikipedia.org/wiki/Fentanyl.

[56] United Nations Office on Drugs and Crime, World Drug Report 2015 (United Nations publication, Sales No. E.15.XI.6), "Emerge of new trafficking hubs", p. 61.

[57] David Trilling, "Uzbekistan Props up Stolen Car Claims against Tajikistan", https://eurasianet.org/uzbekistan-props-up-stolen-car-claims-against-tajikistan.

[58] Europol information, Secure Information Exchange Network Application SIENA 1116254.

[59] Europol information, Secure Information Exchange Network Application SIENA 1130310.

[60] Report of the Commission to Council and Parliament of EU regarding the progress made in regards to enforcing the EU action plan aimed to fight against the traffic with wild species of flora and fauna, Brussels, 24.10.2018, COM (2018) 711 final.

[61] Cross-Border Cooperation Programme Poland-Belarus-Ukraine 2014-2020, http://www.customs.gov.by/en/2014-202-en/.

[62] CELEBET (The Customs Eastern and South-eastern Land Border Expert Team) started in 2016 with the participation of 11 Member States (Bulgaria, Greece, Estonia, Latvia, Lithuania, Poland, Romania, Slovakia, Hungary, Finland, Croatia), having as main goal the enhancement of the operational cooperation, exchanging knowledge and experience, together with harmonizing the EU land border management, https://www.celbet.eu/about/.