

# Legal Approach to Intermodal Transport Security: A Turkish Perspective

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# A- INTRODUCTION TO BASIC CONCEPTS

# Wider to Narrower

- In order to meet the requirements of today's international commerce:
- **A successful supply chain management is needed.**
  - In order to realize this requirement:
  - **A successful logistics is needed.**
    - In order to realize this requirement:
    - **A successful transportation is required.**

# Supply Chain Management

- The management of a network of relationships within a firm and between **interdependent organizations** and **business units**,
- Consisting of **material suppliers, purchasing, production facilities, logistics, marketing**, and related systems that facilitate the **forward and reverse flow of materials, services, finances** and **information**,
- From the **original producer** to **final customer**,
- With the benefits of **adding value, maximizing profitability** through efficiencies, and **achieving customer satisfaction**.

# One of the Functions of Supply Chain Management: Logistics

- Is one of the **most important functions** of supply chain management in the global world.
- Logistics is;
  - Part of the Supply Chain Management process that,
  - Plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information,
  - Between the point of origin and the point of consumption,
  - In order to meet customers' requirements.

# An Important Part of Logistics: Transportation

- Is the movement of people, service and goods from one location to another.
- As an important part of logistics, transportation has an improving role in achieving security in supply chain management.

# Challenges in Today's Supply Chain Management

- Increasing globalization,
- Developments in information technology,
- Fierce competition between companies,
- Growing demands of **security** and
- Increasing awareness towards environmental issues.



# Why Seeking Security in Transportation?

- The security issue is **directly related** to the performance measurement of any supply chain.
- An **insecure supply chain effects**:
  - Intermodal transport organization,
  - Customers,
  - Suppliers,
  - Retailers,
  - Wholesalers,
  - Distributors etc.
- However has not governed in any mandatory conventions.

# **B- UNIMODAL TRANSPORT SECURITY RISKS IN THE LIGHT OF LEGISLATION**

# Unimodal Transport Security Risks

- 1. Piracy and armed robbery** (in marine transportation)
- 2. Accidents** (especially in road transportation)
- 3. Thefts** (especially in rail transportation; metal and cable theft)
- 4. Terrorist attacks** (in all types of transportation)
- 5. Cyber threats** (in all types of transportation)  
– As well as biological attacks and chemical attacks.

# 1. Piracy and Armed Robbery

# Approach of International Legislation Piracy

- Articles 14 to 22 of the 1958 Geneva Convention on the High Seas (Geneva Convention) include special provisions on Piracy.
  - Article 14 of the Geneva Convention states that all States **shall cooperate to the fullest possible extent in the repression of piracy on the high seas or in any other place outside the jurisdiction of any State.**

# Approach of International Legislation

## Piracy

- Articles 100 to 107 of the **1982 United Nations Convention on the Law of the Sea (UNCLOS)** include special provisions on Piracy.
  - Article 100 of UNCLOS states that all States **shall cooperate to the fullest possible extent in the repression of piracy on the high seas or in any other place outside the jurisdiction** of any State.
  - Article 101 of UNCLOS states that **piracy** consists of any of the following acts:
    - (a) any **illegal acts of violence or detention**, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:
      - (i) on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;
      - (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;
    - (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts **making it a pirate ship or aircraft**;
    - (c) any act of **inciting or of intentionally facilitating** an act described in subparagraph (a) or (b).

# Approach of International Legislation

## Armed robbery

- IMO Resolution A.1025(26) (Annex, paragraph 2.2) on IMO's Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery Against Ships, determines that **armed robbery** against ships consists of any of the following acts:
  - (a) any **illegal act of violence or detention** or any act of depredation, or threat thereof, other than **an act of piracy, committed for private ends and directed against a ship or against persons or property on board such a ship, within a State's internal waters, archipelagic waters and territorial sea**;
  - (b) any act of **inciting or of intentionally facilitating** an act described above.

# Approach of International Legislation Piracy

- **1992 Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation** and its 2005 Protocol include important provisions on Piracy.



# Approach of International Legislation Piracy

- **Important resolutions of United Nations Security Council** govern special issues related with piracy:
  - **02.06.2008** dated 1816 numbered resolution
    - **Urging States, whose naval vessels and military aircraft operate on the high seas and airspace of the coast of Somalia to be vigilant**, the Council encouraged States interested in the use of commercial routes off the coast of Somalia to increase and coordinate their efforts to deter attacks upon and hijacking of vessels, in cooperation with the country's Government.
  - **07.10.2008** dated 1838 numbered resolution
    - **Calls on nations with vessels in the Somali piracy region to apply military force** as a means of repressing acts of piracy.
  - **02.12.2008** dated 1846 numbered resolution
    - **Strengthened international efforts to fight piracy off the coast of Somalia**, by expanding the mandate of States and regional organizations working with Somali officials towards that aim.
  - **16.12.2008** dated 1851 numbered resolution
    - Decided that States and regional organizations **cooperating in the fight against piracy and armed robbery at sea off Somalia's coast** for which prior notification had been provided by Somalia's Transitional Federal Government to the Secretary-General -- could undertake all necessary measures "appropriate in Somalia", to interdict those using Somali territory to plan, facilitate or undertake such acts
  - **30.11.2009** dated 1897 numbered resolution
    - Decided to renew, for a period of 12 months, its previous authorizations for **States and regional organizations cooperating with the Somali Transitional Federal Government(TFG) to enter Somalia's territorial waters and use all necessary means to fight piracy** and armed robbery at sea off the Somali

# Approach of Turkish Legislation

- In the national waters of Turkey, there are **no security threats such as armed robbery and piracy**.
  - However Turkish ships are facing with piracy and armed robbery threats outside the national waters of Turkey.
  - Therefore Turkish Ministry of Transportation, Maritime and Communication has formed a **Data Interchange System on Piracy for the Turkish flagged ships** which especially have the routes near Somalia.
- Turkey is neither contracting party to **Geneva Convention** nor **UNCLOS**.
- Turkey is a contracting party to **SUA Convention** since January 1998.
  - In accordance with article 90/5 of **Turkish Constitution 1982**, all of the international conventions that has been entered into force in Turkey has the **prior application** over the rest national legislation.
  - Since there are no special national legislation in Turkey, governing the suppression of unlawful acts in maritime navigation, SUA Convention is the essential legislation for Turkey.

## 2. Accident

# Accident

- **Unintentional failures** on the part of drivers and / or vehicles or deficiencies such as roads and rail tracks and related controls such as air traffic control and signals.

# Approach of International Legislation Road Security

- Several important decisions of United Nations.
- **Strengthening Road Safety Legislation** (2014) of World Health Organization.
  - Risk factors; speed, drink–driving, motorcycle helmets, seat-belts, child restraints.
  - Advisory measurements; legislative and regulatory change.
- The recent decision has been taken on 15 April 2016 the United Nations General Assembly and its member states adopted a resolution on **“Improving Global Road Safety”**.
  - Develop safer road infrastructure.
  - Implement United Nations vehicle-safety regulations or equivalent national standards.
  - Implement road-safety policies for the protection of children, youth, older persons and persons with disabilities.

# Approach of International Legislation Maritime Security

- Important provisions in **Convention on the International Regulations for Preventing Collisions at Sea, COLREG 1972**.
  - Entered into force in 1977,
  - Recognition given to traffic separation schemes,
  - Part A - General; Part B - Steering and Sailing; Part C - Lights and Shapes; Part D - Sound and Light signals; and Part E - Exemptions.
  - There are also four Annexes containing technical requirements concerning lights and shapes and their positioning; sound signaling appliances; additional signals for fishing vessels when operating in close proximity, and international distress signals.

# Approach of International Legislation Maritime Security

- Important provisions in **International Convention on Standards of Training, Certification and Watch keeping for Seafarers, STCW 1978.**
  - Entered into force in 1984,
  - Main purpose of the Convention is to **promote safety of life and property at sea** and the protection of the marine environment by establishing in common agreement international standards of training, certification and watch keeping for seafarers.

# Approach of International Legislation Maritime Security

- Important provisions in **International Convention on Salvage, Salvage 1989**.
  - Entered into force in 1996,
  - Aims to make a major contribution which efficient and timely salvage operations can make to the safety of vessels and other property in danger and to the protection of the environment.



# Approach of International Legislation Maritime Security

- Important provisions in **International Convention for Safe Containers, CSC 1972**:
  - Entered into force in 1977,
  - One of its goals is to maintain a high level of safety of human life in the transport and handling of containers by providing generally acceptable test procedures and related strength requirements,
  - Other is to facilitate the international transport of containers by providing uniform international safety regulations, equally applicable to all modes of surface transport.

# Approach of International Legislation Maritime Security

- Important provisions in **Convention on Facilitation of International Maritime Traffic, FAL 1965,**
  - Entered into force in **1967,**
  - Objectives are to **prevent unnecessary delays in maritime traffic, to aid co-operation between Governments, and to secure the highest practicable degree of uniformity** in formalities and other procedures.

# Approach of Turkish Legislation

- According to the 2014 year data taken from the Turkish Statistical Institute;
  - **Road transportation:** 1.199.010 accidents have occurred, 3.524 people have died and 285.059 people have injured.
  - **Maritime transportation:** 140 accidents have occurred, 27 people have died and 47 people have injured.
  - For **railway** and **airway** transportation no statistics have been reached.

# Approach of Turkish Legislation Road Security

- As accident is a really important security related issue, especially in road transportation there are **several national legislations** in Turkey which state **important penalties** in order to decrease the risk of accident in road transportation such as:
  - Turkish Criminal Code (art. 86 to 93)
    - The penalty differs in accordance with the driver's situation (drunk or not) and the consequence of the accident.
    - Penalty can be given from 1 year to a life long imprisonment.
  - Code on RoadTransportation
  - Regulation on Ensuring Road Transportation Security
  - Regulations on transportation of dangerous goods by road.

# Approach of Turkish Legislation Maritime Security

- Turkey is contracting party to both **COLREG, STCW and SALVAGE** conventions.
  - Consider art. 90/5 of Turkish Constitution 1982.
- Turkey is neither a contracting party to **CSC 72** nor to **FAL Convention**.
- Besides being contracting party to these important conventions, Turkish General Assembly, as a national legislation, **accepted Regulation for Preventing Collisions at Sea on 1978** with the code number 16273.
  - This Regulation is one of the required board documents of the vessel. Hence all the vessels which carry Turkish flag are under obligation to carry that regulation on board.
- Important provisions on liability of the vessel owners after collision and on salvage in **Turkish Commercial Code**, parallel to Brussels Convention 1910 on Collision and Salvage Convention.

# Approach of Turkish Legislation Maritime Security

- Turkish Ministry of Transportation, Maritime and Communication has formed a **Main Research and Salvage Coordination Center** which gives services for 24 hours of 7 days.
  - 434 people have been rescued in maritime accidents reported to this center in 2014.
- Strict **Port State Controls** in Turkish ports.
  - Through **MARPOL** and **SOLAS** convention; environment friendly and safe voyages.
  - Through **STCW convention**; the conformity of the documents of the seamen working in the vessel.
  - Through **ILO convention**; the standardization and protection of the rights of the seamen working in the vessel. Especially in terms of labor security (consider 134 and 164 numbered ILO regulations).
  - Through **Hague, Hague-Visby, Rotterdam rules**; sea, voyage and cargo worthy ship.

# 3. Theft

# Theft

- Cargo theft is an international problem affecting **consumers and businesses** alike.
- In today's global economy, raw materials manufacturing and sourcing often occurs in one part of the world, while the finished product is warehoused and consumed in another.
- Cargo can be stolen at any point in between, compromising product integrity and availability.



# Theft

- No clear statistics can be reached, hence many companies don't report cargo theft to avoid;
  - Bad publicity,
  - Higher insurance rates,
  - Damage to reputation,
  - Embarrassment.

# Approach of International Legislation

- Basically an ordinary theft is the issue which is handling through the **national criminal legislations**.
- As it is frequently seen in railway transportation, important provisions in **Railway Safety Directive** prepared by European Commission on 2004 may be considered;
  - It is necessary to establish a **common regulatory framework for railway safety**,
  - **Common safety targets (CSTs)** and **common safety methods (CSMs)** should be gradually introduced to ensure that a high level of safety is maintained and, when and where necessary and reasonably practicable, improved.
  - Doesn't specially point theft.

# Approach of International Legislation

- Studies of **International Union of Railways** on **Metal Theft** may be considered under this title, and is the real reason why rail transportation has been specially pointed under “theft” title:
  - A big problem for railway networks as thieves target signaling cables, overhead power lines and even metal fences to sell it for scrap.
  - Railway networks are designed to fail safe, which means that when a cable is cut, trains are brought to a stop. Besides, thieves **risk their own safety by handling cables, infrastructure, vehicles or equipment** which may be live and could prove dangerous.
  - This protects **passengers but can lead to long and, frustrating delays** while the problem is examined and fixed safely.
  - **Loss of communication** networks and damage to railway tracks also raise public safety concerns.
  - Both national and international **cooperation and collaboration initiatives are needed** to raise awareness, provide expertise and best practice to allow the exchange of ideas between all parties involved.

# Approach of Turkish Legislation

- Important code which state **important penalties** in order to decrease the risk of theft in transportation is:
  - Turkish Criminal Code
    - Art. 141 to 147 governs the penalties (1 year to 7 years of imprisonment) which will be given to theft,
    - Art. 142 states that if theft is occurred in a transportation vehicle the penalty can not be lesser than 3 years.
- No special regulation on metal or cable theft in railway transportation.

# 4. Terrorist Attacks

# Terrorist Attacks

- Acts of terrorism intersect with transportation systems in three ways:
  - When transportation is the means by which a **terrorist attack is executed**;
    - 11th of September 2001 attacks in USA.
  - When transportation is the **end, or target, of a terrorist attack**;  
or
    - IRA bombing campaign against transit targets in England and Northern Ireland between the early-1970s and mid-1990s
  - When **the crowds** that many transportation modes generate are the focus of a terrorist attack.
    - 2016 Brussels airport and metro station bombings through three coordinated nail bombings.

# Approach of International Legislation

- **International Ship and Port Facility Security (ISPS) Code, 2003**
  - Comprehensive set of measures to enhance the security of ships and port facilities, developed in response to the perceived threats to ships and port facilities in the wake of the 9/11 attacks in the United States.
  - Takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what **security measures are appropriate, an assessment of the risks must be made in each particular case,**
  - Takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to **determine what security measures are appropriate, an assessment of the risks** must be made in each particular case

- **International Convention for the Safety of Life at Sea, SOLAS 1974:**
  - Entered into force in 1980,
  - Generally regarded as the most important of all international treaties concerning the safety of merchant ships.
  - The main objective of the SOLAS Convention is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety.



# Approach of International Legislation

- Action plans taken by EU;
  - Publish a list of **air carriers which are banned** from operating within the union,
    - State of the operators are; Benin, Sudan, Iraq, Nepal, Indonesia, Libya, Afghanistan, Congo, Angola.
  - Form EU LRIT Data Center in order to ensure the long range identification and **tracking of vessels** (LRIT),
  - In terms of **road security, especially in dangerous goods transportation**, advise the adoption of new technologies that can assist in developing smooth high-security systems for the future by reducing the duration and intensity of security checks.
  - No proposals on **rail security**. Hence according to EU, railway transportation is the most safest mode of transport.

# Approach of Turkish Legislation

- Turkey is party to both **SOLAS Convention 1974** (and its 1978 and 2002 Protocol) and **ISPS Code**.
- Besides being contracting party to these important conventions, Turkish General Assembly, as a national legislation, **accepted International Ship and Port Facility Security Code** on 2007 with the code number 26468.
- 3713 numbered 1991 dated **Act on Prevention of Terrorism** govern extremely high penalties for the persons who commit the crime of terrorism.

# 5. Cyber Threats

# Cyber security Threats to Transportation

- In accordance with **today's development in transportation technology** and the increase of the problems (on delay, assignment of rights etc.) in **classical documentary trade**, electronic data is one of the most frequently preferred tool in transportation sector.
- Cyber threats are most frequently oriented to all types of **public transportation** such as air way and maritime transportation.
  - Exploitation, misuse, or simple failure of cyber systems can cause injury or death, harm the environment, or disrupt vital trade activity.

- **Cyber security strategy for European Union (2013)**
  - Achieving cyber resilience, by increasing capabilities, preparedness, cooperation, information exchange and awareness in the field of **Network and Information Security**,
  - Drastically reducing cybercrime by **strengthening the expertise of those in charge of investigating and prosecuting it**,
  - Developing an EU Cyber Defense Policy and capabilities in the framework of the **Common Security and Defense Policy**

# Approach of International Legislation

- In the general concept;
  - Better detection of threats,
  - States and organizations should accept the insufficient degree of precautions,
  - Using sophisticated technologies,
  - Treating cyber-security as an ongoing battle,
  - Having urgent response plans,
  - International cooperation.
- Different from the other risks on transportation, in cyber crimes the criminal can be in the other side of the world. Hence among all of the security risks on transportation, **cyber security risks are the most “global” ones.**

# Approach of National Legislation

- Important provisions in Turkish Criminal Code;
  - Art. 243; person who **accesses an information system illegally**, will be punished with 1 year of imprisonment. If the **information will be lost** upon this crime, the punishment will be increased to 2 years of imprisonment.
  - Art. 244; person **who breaks the operation of the information system** will be punished with 5 years of imprisonment.
  - Art. 124 and 125; person who **bars the communication in between person to person or person to public institution** will be punished with 6 months to 2 years of imprisonment.

# C- INTERMODAL TRANSPORT SECURITY RISKS IN THE LIGHT OF LEGISLATION



# Wider to Narrower

- When the issue is using more than one mode of transportation there will be several concepts:
  - Multimodal transportation
  - Intermodal transportation
  - Combined transportation

# Multimodal Transportation

- **Consider the definition in U.N. Multimodal Convention 1980:**
  - The carriage of goods by **at least two different modes** of transport,
  - On the basis of a **multimodal transport contract**,
  - From a **place in one country at which the goods are taken in charge**,
  - By the **multimodal transport operator**,
  - To a place designated for delivery situated in a **different country**.
- **Condition;**
  - at least two different modes of transport.

# Intermodal Transportation

- **Consider the definition in Glossary for Transport Statistics 1997 prepared by EUROSTAT, ECMT and UNECE and in Combined Transport Terminology 2001 prepared by UNECE:**
  - The movement of goods,
  - In one and the same **loading unit** or road vehicle,
  - Which uses successively two or more modes of transport
  - Without handling the goods themselves in changing modes.
- **Condition;**
  - at least two different modes of transport,
  - handling the loading unit.

# Combined Transportation

- **Consider the definition in Combined Transport Terminology 2001 prepared by UNECE:**
  - Where the major part of the European journey
  - Is by rail, inland and waterways or sea and any initial or final legs
  - Carried out by road are as short as possible
- **Condition;**
  - at least two different modes of transport,
  - handling the loading unit,
  - loading unit is wheeled.

# Which Term to Use?

- The concepts of “multimodal”, “intermodal” and “combined” transport are interpenetrated.
- However has **no importance in terms of legal application**:
  - Hence none of the transportation modes are governed through mandatory conventions,
    - **UNCTAD ICC RULES?** Not mandatory
    - **Multimodal Convention 1980?** Not into force
    - **Rotterdam Rules?** Not into force and wet multimodal.
    - Consider applicable clauses of bills of lading,
      - If there are no applicable clauses of bills of lading; the solution of UNCTAD (Multimodal Transport: The Feasibility of An International Legal Instrument)
        - Differs on the determination of the place where the damage has been occurred.

# Intermodal Transport Security Risks

- As intermodal transport is the combination of more than one mode of transportation, it **includes all of the above mentioned risks** and:
  - The security risks which may occur in the **intersection points** arising from the
    - **intermodal vehicles** and
      - The vulnerability of ships at sea to piracy and sea robbery depends on factors such as the type of ship, its size, speed, freeboard and voyage
    - **loading units.**
      - Containers are also vulnerable since they can be used to transport illegal immigrants, firearms and other weapons, smuggled goods and weapons of mass destruction

# Many Factors are Effecting Security Risks in Interchange Points

- **Problem 1:** Insufficient Technological Harmonization
  - Emerging technologies provide some capabilities to help companies to protect their supply chain and intermodal transport chain.
  - **Probable Solutions:**
    - Personnel identification systems,
    - Electronic manifests,
    - Record keeping,
    - Improved communication systems,
    - Vehicle / container screening.

# Many Factors are Effecting Security Risks in Interchange Points

- **Problem 2: Insufficient Training**
  - The key element in prevention and proper response to security threats is being considered as operators, drivers, ships crew and personnel who are well trained and prepared to act when they experience dangerous or threatening situations.
  - **Probable Solutions:**
    - Training and authorization of staff at interchange points,
    - Implementation of new training systems.



# Many Factors are Effecting Security Risks in Interchange Points

- **Problem 3: Economic Factors**
  - Insufficient technological harmonization and training factors mostly arise from economic factors.
  - **Probable solution:** leaving this issue to economists.

# Many Factors are Effecting Security Risks in Interchange Points

- **Problem 4: Insufficient Legal Protection**
  - Security and safety related issues on other modes of transport (such as rail transport, road transport) and, in case of an integrated system, on interchange points haven't been regulated by any mandatory international regimes or the national legal regime of Turkey.
  - **Probable solutions:**
    - **(1) Regulation on Enhancing Supply Chain Security, EU 2006.**
    - **(2) Liability Insurance Applications.**

# Solution 1:

## Regulation on Enhancing Supply Chain Security, EU 2006

- 27/02/2006 dated “Report on on Enhancing Supply Chain Security” {SEC(2006)251} draw a **“secure operator” scheme** by setting them up in the member states and proposed a regulation on enhancing supply chain security.
- “Secure operators” would furthermore be able to demonstrate to the market their ability to keep the **supply chain free of security breaches, to distinguish themselves positively from other operators** and to establish a **positive trend in business security performance**.
- An operator may apply to be awarded “secure operator” status provided it is involved in one of the following activities in the supply chain: a) **preparation of goods for shipment** and shipment of goods from the production site; b) **transport of goods**; c) **forwarding of goods**; d) **warehousing, storage or inland terminal operations**.
- However this mechanism can not be effectly operated without the **support of any national mandatory legal regulations**.

# Solution 2:

## Liability insurance applications

- **Liability insurance applications** which may be applied when there is a damage after the occurrence of a risk of security.
- However as the insurers will have no drawee after the payment of the compensation they will offer high premiums which will effect all the players (from operators to buyers) in intermodal transport chain.

# As a Result

- Transport security is **important in a successive supply chain** management,
- **Unimodal transport security risks** have been determined and considered worldwide through **mandatory international and national legislations**,
- Intermodal transport which face more security risks when compared with the unimodal transport (**unimodal transport risks + risks in interchange points**) has lack of **international and national (through Turkish approach) legislation and thus legal protection**,
- **Technological harmonization, education and training, economic factors** may prevent the occurrence of such risks.  
However none of them replace the important protection of legal arrangements.

# Thank you for listening

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