

## Section 3. Technical science in general

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### IMPROVEMENT OF MECHANISMS FOR ANALYSIS OF PRIMARY DATA OF PRODUCT DESCRIPTION BASED ON ARTIFICIAL INTELLIGENCE SYSTEMS

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#### Abstract

In this article, foreign experiences of mechanisms for analyzing the primary data of the description of goods based on artificial intelligence systems in customs control and customs clearance of goods and vehicles (V) transported across the customs border are studied. Also, in the activity of the customs system, suggestions were made regarding its solution by connecting the columns of the customs cargo declaration in order to increase the reliability of the information of the product description of vehicles, to form the integrity of the identification processes on the basis of a logical control system.

**Keywords:** *product description, brand code, Commodity Nomenclature of Foreign Economic Activity (CN FEA) code, artificial intelligence, product position, foreign economic activity (FEA), vehicle (V), VIN code*

#### Login

According to Article 21 of the Customs Code of the Republic of Uzbekistan, goods and vehicles (V) transported across the customs border must undergo customs control and customs clearance.

In recent years, many measures have been implemented in our country in order to further develop foreign trade and foreign economic activity (FEA), to create more favorable conditions for FEA participants. Achieving these and similar goals, in turn, requires creating benefits and favorable

conditions for entrepreneurs, as well as attracting foreign investments, and introducing simplified, transparent and reliable customs procedures to international standards. In addition, international standards also require the introduction of simplified, transparent and reliable customs procedures. An example of this is “On Simplification and Harmonization of Customs Procedures (May 18, 1973 Kyoto). The international convention for the Republic of Uzbekistan, which entered into force on May 16, 2021, can be cited (International Convention,

1973; Customs Code of the Republic of Uzbekistan, 2016).

### Analysis

On the other hand, unfortunately, cases of abuse of privileges, preferences and other opportunities created in practice are also noticeable. The legislation also includes actions aimed at eliminating situations that allow significant damage to the state economy for the sake of their own interests by illegal means and false information.

In the Transit Declaration No. 26003/02.03.2022/0018808 in the observation of customs practice “Cars and other motor vehicles designed mainly for transporting people: Lot 31319747 Bought on auxion with water damage, i.e. a recessed used passenger car with an electric damper (Electromobile), model 2020 TESLA MODEL 3, (VIN) № 5YJ3EB-1LF647916” when the customs value of the motor vehicle was re-examined, it was revealed that the same VIN was sold for 25,575 US dollars on the websites of vehicle, which sank in digital water. Today, transportation costs for transporting 1 container from the USA to Uzbekistan are 8,000–10,000 US dollars. Taking into account that 2–3 vehicles can fit in 1 container, however, the original technical condition of the vehicle was correctly determined by the

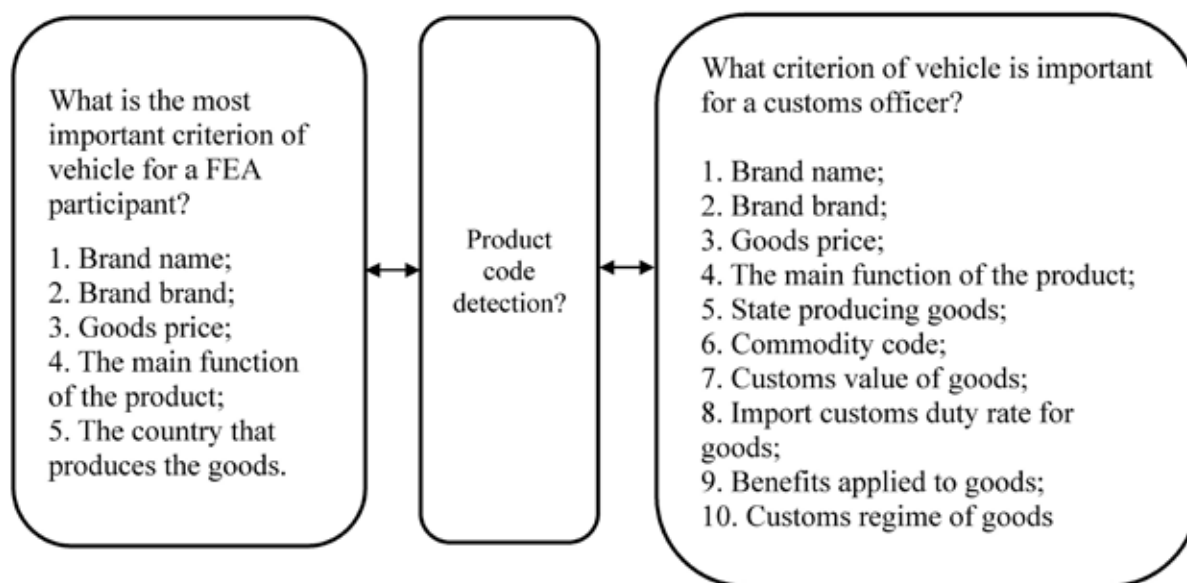
customs officer, and the customs value taken as 31,000 US dollars compared to the imported vehicle was calculated correctly. (<https://bid-fax.info/tesla/model-3/10766409-tesla-model-3-long-range-2020-blue-dual-vin-yj3e1e-b1lf647916.html>).

In customs clearance, the name of the goods or vehicles, the brand of the goods, its technical, chemical, and physical characteristics are the main elements for determining the product code for the FEA participant (Fig. 1).

The CN FEA code of the goods cannot be deliberately chosen incorrectly, of course, in such a situation, the customs officer can have a strong sense of intelligence, vigilance and responsibility, and carry out additional field research.

If we talk about the sites of the Republic of India (<https://www.seair.co.in/>) or World Customs Organization (WCO) Bacuda (<https://bacuda.wcoomd.org/#aiHS>), which currently determine the CN FEA code of a product based on artificial intelligence systems (<https://bacuda.wcoomd.org/#aiHS>; [https://tarif.customs.uz/spravochnik/view-Datatable.jsp?lang=en\\_EN](https://tarif.customs.uz/spravochnik/view-Datatable.jsp?lang=en_EN)). For example, through the (<https://www.seair.co.in/>) site, we can also see its CN FEA code and CN FEA codes of other similar goods relatively close to this product and their review (Figure 2).

**Figure 1.** Product code determination criteria



In any case, the CN FEA code of the goods cannot be selected incorrectly, of course, in such a situation, a strong intelligence, vig-

ilance and a sense of responsibility are required from the customs officer. There are social processes in which the human factor is

involved, and it is natural that there will be mistakes and shortcomings.

**Figure 2.** The result of the product positions according to the text of the Motor sars

HS CODE	DESCRIPTION	NO OF SHIPMENTS
3006	Pharmaceutical Goods Specified In Note 4 To This Chapter	
30065000	First-aid boxes and kits	29
3919	Self-Adhesive Plates, Sheets, Film, Foil, Tape, Strip And Other Flat Shapes, Of Plastics, Whether Or Not In Rolls	
39199010	Plastic stickers, whether or not printed, embossed, or impregnated	55
3926	Other Articles Of Plastics And Articles Of Other Materials Of Headings 3901 To 3914	
39263090	Other	107
4011	New Pneumatic Tyres, Of Rubber	
40111010	Radials	29
8708	Parts And Accessories Of The Motor Vehicles Of Headings 8701 To 8705	
87089900	Other	18

Table 1 shows the proximity of TIF TN to 5 commodity positions based on this survey.

**Table 1.**

No	Product position	Comment
1.	3006	Pharmaceutical equipment.
2.	3919	Self-adhesive, in rolls or coils, of plastics in plates, sheets, films, tapes, strips and other flat forms.
3.	3926	Other articles made of plastic.
4.	4011	New tires with pneumatic tires.
5.	<b>8708</b>	<b>Parts and accessories of motor vehicles of headings 8701–8705.</b>

Figure 2 above analysis data shows the integral proximity of the product to 10 commodity positions.

Bacuda (on the site called <https://bacuda.wcoomd.org/#aiHS>), through the text of the Motor sars, determines the commodity codes in the CN FEA, which are relatively close to the commodity code (Fig. 3).

By referring to the Harmonized System (HS) code system, we can clearly define the initial product code using the product position review (Harmonized commodity description, 2022).

If we pay attention to the results of sites based on artificial intelligence, if you search through the name of the product on the web-

site [www.seair.co.in](http://www.seair.co.in), it will help you to search for the product not only by name, but also by its features on the Bacuda site.

There is also a pricing section on the site, which is an effective approach to avoid artificially inflated or lowered prices. At the same time, it provides practical assistance in ensuring a high level of collection of customs fees in the prescribed manner.

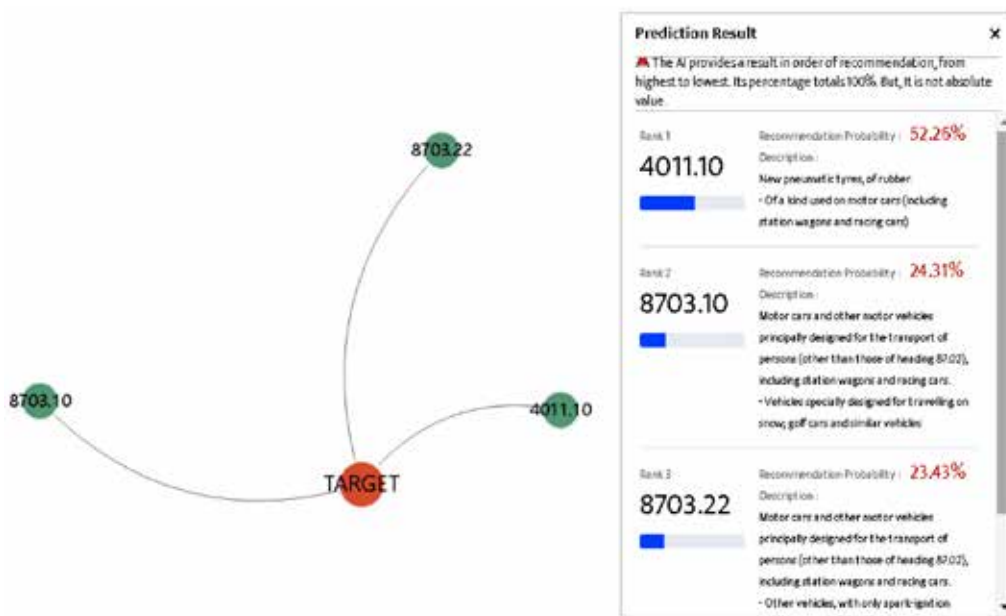
Today, we had the opportunity to determine the product code by analyzing the description of the goods provided by FEA participants based on the artificial intelligence system.

2016 of the State Customs Committee of the Republic of Uzbekistan registered on April 6, list number 2773 “Primary informa-

tion about vehicle according to the instructions on the procedure for filling out the cus-

tom's cargo declaration" in column 31 and exit parameters are column 33.

**Figure 3.** Analysis of commodity codes with a relative proximity of the CN FEA of vehicle relative to the product position 8703



“Commodity code” and column 34. “Country of Origin kodib”, column 38. “Netto weight (kg)”, column 41. “Additional unit of measurement”, column 5. “Total number of product names” we can get real information about the product based on the identification logical connection through the VIN code (Instructions on the procedure for filling, 2016; <https://www.ahelp.ua/vin.html>; Akulova, A.A., 2017). That is, according to each entry parameters of the goods in relation to

the product description package, the customs cargo declaration with the authenticity of the goods is directly reliable for the above columns 33, 34, 38, 41, 5. we will provide.

### Method

Technical characteristics of the TV as an incoming (x) value of column 31 of customs cargo declaration product description, its output (y) value is combined according to (table 2).

**Table 2.** VIN code – 1 N4 AZ0CP 2 D C402941 ↔ (1N4AZ0CP2DC402941)

No	x value VIN code's review	y value Customs cargo declaration column
1	1 – Country of manufacture code	34-graph. “Country of Origin code”
2	N – Manufacturer’s name and production department	31-graph product description
3	4 – vehicle type	31-graph product description
4	AZ0CP – Car model and its main features: body type, power supply, transmission system, etc	31-graph product description 38-graph. “Netto weight (kg)” 41-graph. “ Additional unit of measurement ” 5-graph. “ Total number of product names ”
5	2 – inspection code (for cars from the United States)	38-graph. “Netto weight (kg)” 41-graph. “Additional unit of measurement”.
6	D – Year of manufacture	31-graph product description
7	S – Production plant	–
8	402941 – vehicle serial number	31-graph product description

**Conclusion:**

Therefore, on the basis of artificial intelligence, each descriptive element in the product description package may not be complete or sufficient, but on the basis of each element of the goods, the name of the goods, the brand of the goods, identification

according to the main task performed by the goods, as well as the above-mentioned 1st table of the customs cargo declaration The integral connection of the vehicle under the logical control of the VIN code in accordance with the table helps to ensure its authenticity.

**References**

- International Convention (Kyoto, 1973). “On simplification and harmonization of customs procedures”. URL: <http://www.wcoomd.org> Kyoto convention.
- Customs Code of the Republic of Uzbekistan. Customs Code approved by the Law of the Republic of Uzbekistan dated January 20, 2016 No. ORQ-400.
- URL: <https://www.seair.co.in/> – Seair Exim Solution site.
- URL: <https://bacuda.wcoomd.org/#aiHS> – Bacuda site of the World Customs Organization (WCO).
- Harmonized commodity description and coding system, seventh edition (2022). URL: [https://tarif.customs.uz/spravochnik/viewDatatable.jsp?lang=en\\_EN](https://tarif.customs.uz/spravochnik/viewDatatable.jsp?lang=en_EN).
- Instructions on the procedure for filling out the customs cargo declaration, registered in the Ministry of Justice of the Republic of Uzbekistan on April 6, 2016 with No. 2773.
- URL: <https://www.ahelp.ua/vin.html> – **Axelp** – car portal.
- Akulova, A.A. (2017). Fundamentals of car design: educational. manual.– Ekaterinburg: Ural Publishing House. una,.– 168 p.

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