



# International Trade Rules for AIGC: Cutting-Edge Challenges, Fragmented Governance, and Future Prospects

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**Abstract.** This article briefly summarizes the rapid development of AIGC international trade and the fundamental challenges it poses to the traditional trade rule system based on physical goods. It highlights the core of the article: systematically reviewing the current fragmented state of rule application, analyzing core contentious issues, assessing the pros and cons of multilateral and regional governance pathways, and ultimately proposing key directions and a research agenda for future rule construction.

**Keywords:** Artificial Intelligence Generated Content; Digital Trade; International Trade Rules; WTO Reform.

## 1 Introduction - AIGC Reshapes the New Landscape of Global Trade

The world is in an era profoundly transformed by artificial intelligence. Among these transformations, the rise of generative AI is particularly remarkable. It is no longer just a tool for data analysis or task execution but can, like humans, create text, generate images and videos, compose music, write code, and even conduct scientific research. With the global application of models like ChatGPT and DeepSeek, AIGC has moved beyond the laboratory and is entering the global economic system at an unprecedented speed and scale, creating entirely new business models and trade forms. For example, a US company can subscribe to a Chinese AIGC video generation product; a French independent game developer can purchase original music generated by AI in the US; a South American startup can utilize a US-based large AI model via a cloud platform to develop localized applications. These cross-border activities of AIGC production, sale, and consumption constitute a vivid picture of AIGC international trade [1].

On one hand, AIGC trade activities are becoming increasingly prevalent. On the other hand, academic research on this trade is still in its infancy. A review of existing literature reveals that most studies approach the topic from two different angles: one focuses on the macro rules of digital trade, such as e-commerce issues related to cross-border data flow, but often treats AIGC trade merely as a special case of digital trade without affirming its independent research value; the other concentrates on AI

governance, discussing algorithmic fairness, but mostly from the perspective of domestic Chinese law, lacking focus on international trade aspects.

Future research needs to systematically sort out the rule application environment, potential difficulties, key controversies, and future governance methods for AIGC based on its characteristics and in conjunction with the international trade rule system. This research area is currently a gap, which this article aims to fill. Therefore, this article seeks to provide a comprehensive exploration of this frontier topic: the applicable international trade rules for AIGC.

## **2 Rule Foundation and Application Difficulties - Examining from the Perspective of Existing International Trade Frameworks**

### **2.1 Primary Challenge: The Controversy over AIGC's Legal Classification[2]**

Integrating AIGC into the existing framework first requires determining its legal attributes. This determines whether the General Agreement on Tariffs and Trade (GATT) or the General Agreement on Trade in Services (GATS) applies, as the rules differ significantly. Classifying AIGC products as "goods" is problematic because GATT applies to tangible physical goods, while AIGC is intangible information. The server storing the AI model can be considered a good, but the core value of AIGC—the generative capability or the generated content—clearly is not.

Some regional trade agreements have begun experimenting with the concept of "digital products," under which AIGC could potentially be subsumed. However, the WTO framework has not formally incorporated the "digital product" category, and debates persist about whether GATT or GATS rules would apply. Therefore, classifying AIGC as a digital product does not thoroughly resolve the rule applicability issue but merely shifts the debate to a new level.

### **2.2 Limited Applicability and Shortcomings of Existing Rules**

Even if AIGC is classified as a service, existing rules prove insufficient in addressing its specificities. Core WTO principles face challenges. The Most-Favored-Nation (MFN) principle requires that any advantage granted by a member to any country must be extended immediately and unconditionally to all other WTO members. However, AIGC services, potentially involving data security concerns, might lead countries to restrict such services from specific countries, raising debates about whether this constitutes a legitimate exception to the MFN principle.

Recognizing the lag in multilateral rules, recent regional trade agreements like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the US-Mexico-Canada Agreement (USMCA) include chapters on "digital trade." These provisions offer some foundational guarantees for AIGC trade.

### **2.3 Cross-Jurisdictional Rules and Potential Conflicts**

AIGC trade is subject not only to trade rules but also to international trade law, data law, cybersecurity law, and domestic AI regulations. This cross-jurisdictional nature leads to rule complexity and potential conflicts.

For example, a Chinese company providing AIGC services to Europe must consider not only trade agreement commitments between China and the EU but also comply with domestic laws like China's Data Security Law and Personal Information Protection Law, as well as EU regulations like the AI Act and the General Data Protection Regulation (GDPR). These regulations create de facto regulatory barriers.

In summary, the existing international trade rule system provides an ill-fitting environment for AIGC, increasing uncertainty in international trade. This constitutes the genuine difficulty facing AIGC international trade.

## **3 Key Issues Requiring Resolution**

### **3.1 Intellectual Property Ownership and Infringement Liability**

The primary issue encountered in AIGC trade is intellectual property ownership. When AI-generated works are used for commercial designs, there is no unified standard for copyright attribution. More problematic is the copyright issue surrounding training data. AIGC training data often contains vast amounts of copyrighted material. Whether such use constitutes fair use or infringement remains undecided. This disagreement directly impacts the legality of AIGC models [3].

Furthermore, infringement liability is unclear. If AIGC output infringes on existing copyrights, who is liable—the developer, the user providing the prompt, or the platform provider? The lack of clear rules creates significant legal risks for AIGC trade participants.

### **3.2 Regulation of Cross-Border Data Flow and National Security**

Free-flowing data is crucial for AIGC training. However, regulations like the EU's GDPR restrict the transfer of personal data outside the EU; China's Data Security Law and Personal Information Protection Law establish a classified and graded management system for data exiting China; the US generally advocates for free data flow.

These differing regulations create substantial barriers for AIGC trade. A company aiming to provide AIGC services to the global market may need to establish data centers in different countries, significantly increasing operational costs. Therefore, balancing data flow efficiency with national security concerns within trade rules becomes a key issue.

### **3.3 Identification and Definition of New Trade Barriers**

Non-tariff barriers in AIGC trade often manifest as compliance requirements. For instance, a country might demand that AIGC providers disclose their core algorithms for

security reasons, contradicting principles of protecting trade secrets. Mandatory human content review requirements could render real-time generation services unfeasible.

The EU's AI Act imposes strict compliance obligations on high-risk AIGC systems based on a risk classification. In an international trade context, these compliance costs can form *de facto* market barriers, impeding free trade [4].

## 4 Governance Prospects and Methods

### 4.1 Divergent Rules Among Major Economies

The three major economies—the United States, the European Union, and China—exhibit different approaches to AIGC governance, influencing the unified construction of international trade rules.

The United States adheres to a technology-led and market-driven model, emphasizing industry self-regulation and innovation to maintain its technological leadership. In trade, through agreements it champions (like USMCA), the US includes provisions ensuring data free flow and protecting source code, aiming to remove legal obstacles for US AIGC companies entering global markets, minimizing government intervention, and creating a free and open environment for AIGC trade.

The European Union has introduced the AI Act, proposing a risk-based classification regulatory approach. It imposes requirements on AIGC regarding transparency, copyright, and model risk assessment, aiming to embed EU values of human rights and ethics into technical rules. In international trade, the EU attempts to promote these domestic regulatory standards as global standards. Due to their stringent nature, these compliance requirements can easily form *de facto* trade barriers.

China advocates for a model balancing development and security. China encourages the development of the AIGC industry but emphasizes it must be safe and controllable. The currently enacted "Interim Measures for the Management of Generative Artificial Intelligence Services" adopts a management method combining a filing system with a negative list, stipulating that training data must have legal sources and generated content must comply with regulations. While supporting digital trade, China places greater emphasis on countries' rights to regulate based on security and development objectives, expressing more reservation towards completely free data flow.

These divergent models subject AIGC international trade to three different sets of rule standards, increasing operational costs and complexity for enterprises and making international rule unification more difficult.

### 4.2 The Long Road Towards Collaborative Governance

Although fragmentation is currently dominant, momentum and attempts towards collaborative governance are also emerging. International organizations like the OECD and UNESCO are actively promoting global consensus on AI ethics principles, providing a value foundation for future, more specific trade rules. For instance, forming minimum global standards on transparency, fairness, and accountability could help reduce trade uncertainty.

Therefore, the fragmented state of AIGC international trade is unlikely to change significantly in the short term. On the other hand, the need for unified rules drives dialogue and exploration. The most probable future scenario may not be consensus on all details but rather limited consensus on some basic issues (e.g., transparency) while maintaining differentiated competition regarding ethical and safety standards.

## **5 Future Outlook - Building an Inclusive Rule System**

### **5.1 Possible Pathways for Rule Evolution**

The future composition of AIGC international trade rules is unlikely to stem from a single source but will likely involve a complex interplay of multiple approaches.

Since overall rule unification is unlikely, a pragmatic approach involves countries seeking consensus on foundational issues. For example, within the WTO e-commerce negotiations, a basic principle like the permanent moratorium on customs duties for electronic transmissions might be achieved first. This incremental approach aims to pave the way for addressing newer trade barriers.

The future rule system will likely be multi-layered. A base layer with few basic principles, a middle layer of regional rules dominated by major economies, and an upper layer of specific standards and best practices formed within various industries.

### **5.2 Research Agenda Requiring Deepening**

The value creation of AIGC is distributed across stages like algorithm development, data training, computing power investment, and user interaction, potentially spanning multiple jurisdictions. Therefore, clear criteria for determining the origin of AIGC products/services are essential. Criteria could be based on the developer's nationality, the source of training data, or the location of servers providing computing power. Alternatively, a comprehensive weighted assessment system might be developed. This research is crucial for clarifying AIGC trade policy and preventing rule abuse.

While AIGC can lower innovation thresholds for SMEs, the use of computing power and data might be monopolized by large firms. Research is needed on how trade rules and policies can ensure AIGC technology serves SMEs, for example, by simplifying compliance costs for cross-border data flow for SMEs. This is vital for ensuring broad sharing of trade benefits and preventing the widening of the digital divide [5].

## **6 Conclusion**

AIGC international trade exhibits a serious mismatch with the international trade rule system born from the industrial age. From legal classification to ambiguous intellectual property boundaries, from data flow regulations to the emergence of new trade barriers, existing rules show significant lag.

Current global reform proposals are characterized by fragmentation. Major economies like the US, EU, and China, based on their respective technological advantages,

value systems, and strategic interests, are promoting different rules. Looking ahead, the evolution of AIGC international trade rules will be a long-term and dynamic process. The formation of AIGC international trade rules is crucial for the distribution of commercial interests and the future order of the global digital economy. Challenges and opportunities coexist. Only through forward-thinking, constructive dialogue, and sustained cooperation can the international community hope to jointly create a set of inclusive, equitable, and sustainable new international trade rules for AIGC.

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