

THE CHAIN GAME

EXPERIENCE HOW INTERNATIONAL SUPPLY CHAIN LOGISTICS CAN BECOME MORE ROBUST, RELIABLE AND EFFICIENT



TNO innovation
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SYNOPSIS

- **How can international supply chains become more efficient and effective?**
- **Is it possible to improve visibility over international logistics for both business and governmental purposes?**
- **Which innovative data sharing concepts are effective and for who?**
- **And how do we create awareness over the importance of collaborating throughout the supply chain?**

TNO developed the Chain Game with the aim to give an answer to the above mentioned questions.

A high-performing supply chain requires the different actors to collaborate more intensively across organisational boundaries. The Chain Game illustrates how innovative data-sharing concepts can make supply chains more robust, reliable

and efficient. In this stimulating game environment, players are permanently confronted with decisions and incidents that require them to share resources, contribute insights and align not only with the other supply chain partners, but also with Customs.

Player testimonies reveal that the Chain Game is an excellent training tool to support the mindset shift from a 'transaction-based' thinking towards a 'chain-oriented' multiparty approach.

CHAIN ORIENTED THINKING

With increasing flows of containerised traffic and growing emphasis on (national) security, businesses and government are struggling to find efficient and effective means to improve the commercial performance of supply chains and ensure security. In order to achieve these goals,

a mindset shift towards 'chain-oriented' thinking is necessary: the parties involved in a supply chain act in support of the overall chain performance, instead of only their individual short-term positions.

Innovations that support reliable data sharing enable this mindset shift.

Better collaboration across organisational boundaries can improve supply chain performance by increasing visibility over demand fluctuations, untapped opportunities and potential risks.

The government also benefits from the data exchange in the form of more efficient and more effective supervision: limited resources are used to control fewer and more precisely defined vulnerabilities.

THE CHAIN GAME

The 'Chain Game' allows players to observe how innovative data-sharing concepts can make supply chains more robust, reliable and efficient. By means of an engaging experience, this interactive game creates awareness over supply chain complexity and the interdependencies between the various partners. Moreover, players are permanently confronted with decisions and incidents that require them to share resources, contribute insights and align not only with the other supply chain partners, but also with Customs.

HOW DOES THE GAME WORK?

Two manufacturers, two forwarders and a client organisation (buyer), all part of the same supply chain, try to improve their performance. Each player pursues his/her individual goals. By investing in various supply chain innovations, players a) increase their capacity to cope with risks such as strikes, drug smuggling, product safety scandals or supplier bankruptcy; and b) improve their compliance with Customs regulations. Investments can be made in either individual innovations (only the company making the investment will benefit from its results) or chain-wide measures. The latter require joint investment from several players. Are each player's goals best served by individual innovations or by making joint investments? And do the parties trust each other enough to make joint investments?

Each game round, there is a chance that Customs steps in to assess the trustworthiness of the trade lane. Also, players need to make decisions in reaction to unforeseen incidents occurring in the supply chain.

The player's performance is measured based on his/her company's stock value. The value of this indicator can be influenced by factors such as: the effects of supply chain innovations, the result of the risk assessment performed by Customs, and the way incidents are dealt with. The player with the highest company stock value at the end of the last round wins the game.

TARGET GROUPS

Player testimonies reveal that the 'Chain Game' is an excellent training tool to support the mindset shift from a 'transaction-based' (bilateral) thinking towards a 'chain-oriented' (multiparty) thinking. Therefore, the game addresses:

- Professionals from companies participating in supply chains (eg. suppliers, clients, forwarders)
- University academic staff active in the logistics field
- Trade associations
- Government organisations responsible for supply chain supervision (eg. Customs)

FORMAT

The duration a game session is 1.5 to 2 hours, including introduction and a debriefing discussion. The game can be played with 5 to 10 players and will be facilitated by a TNO expert. Necessary materials, such as touch tables and other IT equipment, as well as the IT support can be arranged by TNO.

This 'serious game' was developed as part of CASSANDRA, a project funded by the European Commission under the Seventh Framework Program. TNO participated in this project, along with 26 other international partners. For more information over CASSANDRA, visit: www.cassandra-project.eu

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CONTACT

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