MATERIAL 1

Pro-DEENLA

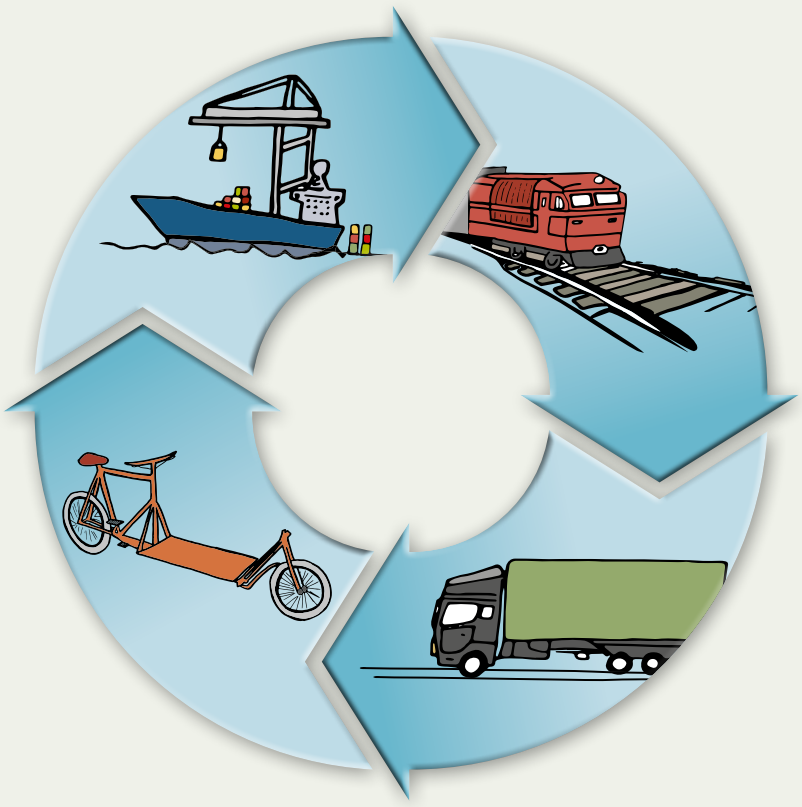
LEUPHANA UNIVERSITY OF LÜNEBURG

Steinbeis Innovation Center Logistics and Sustainability

SIMULATION

"COMBINED TRANSPORT. HAULAGE AND LOGISTICS OF THE FUTURE!?"

NOTES FOR TRAINERS/TEACHERS



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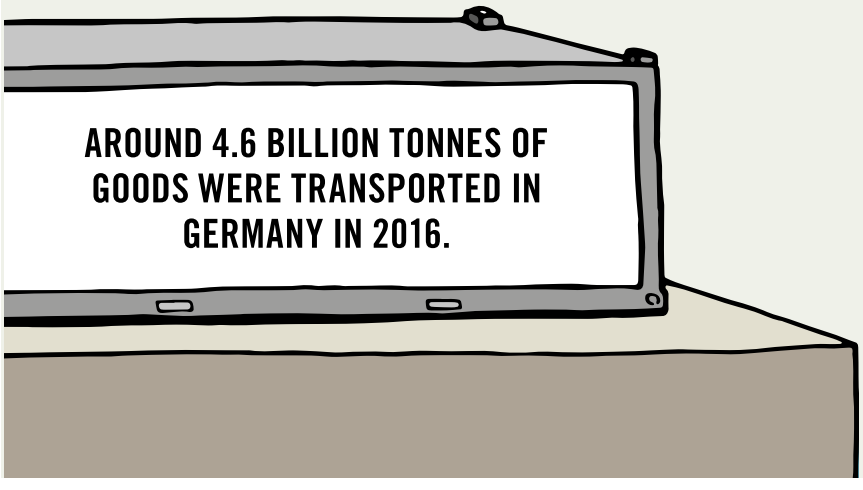
1. THE PRESENT DAY

Around 4.6 billion tonnes of goods were transported in Germany in 2016. This represents a quantity of around 56 tonnes per inhabitant. The prognoses suggest that this volume will increase to 75 tonnes by the year 2050. In terms of transport performance (base year 2015), most goods (71 per cent) are conveyed by road. The modes of transport of rail and inland waterway account for a further 18 per cent and 8 per cent respectively (source: TCI Röhling, StBA). Storage nowadays thus mainly takes place on the road in the form of "rolling warehouses". At the same time, the requirements made of delivery services and the logistics process chain are becoming ever more complex. When a new car is handed over to a customer, for example, the various components and parts contained within it have often completed more transportation kilometres than the vehicle itself will ever travel. Increasing growth in traffic volume is causing more jams and bottlenecks, and this problem is not just confined to major built-up areas. The annual costs incurred are running at several billion euros.

The goal of the federal government is to combat climate change by reducing CO_2 emissions by 40 per cent by 2020. The target set for 2050 is as high as 80 to 95 per cent. In 2015, the transport sector accounted for a proportion of 18 per cent of overall emissions. However, this figure could increase dramatically if the amount of freight transport continues to rise. Better levels of efficiency in the commercial vehicle sector, e.g. as a result of technical improvements, are being offset by the ongoing increase in traffic volume. Transport-related CO_2 emissions are therefore stagnating. In 1990, the transport sector was responsible for 163 tonnes of CO_2 equivalents. The corresponding figure for 2014 was 164 million tonnes.

Increasing online trading is an important reason behind the rise in the volume of freight transport. Parcels and packages now make up four in five items sent. In 2016, for example, approx. 7.2 per cent more courier, express, and package and parcel deliveries were transported than in the previous year. The volume of items sent was 3.16 billion. This was the first time that the three billion mark has been exceeded, and figures continue to rise. The growing number of small-scale shipments including returns and increasing demand for "same day delivery" mean that innovative delivery concepts are required, particularly over the "last mile".

Environmentally friendly and future-proof transport and logistics networks are a prerequisite if successful and sustainable business development is to be achieved. This is particularly true for a country like Germany, which is deeply integrated into global economic cycles and is also one of Europe's key transit hubs by dint of its central position. But expansion and modification of the road, rail and waterway network also forms an important foundation for forward-looking transport and logistics networks. The answer to the question as to what we should view as being a sustainable structure for the road, rail and waterway network is, however, far from obvious. The spectrum of responses is characterised by different perspectives and firm views held by different vested interest groups. Political decision-making processes are thus subject to the influences exerted by a range of factions within society. Against such a background, it comes as no surprise that the decision-making route towards the specific shaping of a sustainable road, rail and waterway network constitutes a complex task which also gives rise to contradictions between clashing social policy requirements. The stakeholders involved need to face up to these demands.



2. THE SIMULATION SCENARIO

Simulating these correlations represents a "play-based" way of understanding the complex and sometimes contradictory perspectives adopted in respect of designing a future-oriented road, railway and waterway network and thus realising transport and logistics networks that are aligned towards sustainability. This is the whole point of simulations. Within this process, the players take on the roles of interest groups or of representatives of the political administration. They are faced with the task of representing and negotiating their respective interests in the best possible way.

This simulation was designed by planpolitik GbR on behalf of the Heinrich Böll Foundation and has been further developed in a project-specific way by the Pro-DEENLA team. The game focuses on shaping Germany's future and forward-looking infrastructure policy. The federal government has made a total of 50 billion euros available over the next five years for the future-oriented expansion and modification of the road, rail and waterway network. This money is divided into two separate pots. The first of these pots encompasses funding for the expansion and reconstruction of infrastructure. The second pot is set aside for environmentally conscious innovations (e.g. traffic control systems or new types of drive systems).

Lobbying groups for the individual modes of transport pay attention when such a sum of money is allocated. The railways, the roads, and the waterways all suddenly seem to be particularly important. The Ministry of Transport and the Ministry for the Environment have called together various lobbying groups to attend hearings in order to decide how the funding will be used.

Ultimately, the focus is on the self-reflective question of how transport and logistics networks (of the future) should be structured. When looking at this issue, each stakeholder is called upon to think in an occupationally related way about the possibilities for an (alternative) way of designing logistics networks. Within this context, stakeholders are encouraged to develop and reflect upon their own views, opinions, visions, utopias, and so forth. However, as reality frequently shows, the most useful idea is not always immediately implemented. Politics is, after all, a matter of negotiation. Who gets what? And who determines this? Who is able to press home an advantage against whom? The daily business of politics involves bringing together conflicting interests, seeking compromises, and making decisions about the distribution of aspects such as money, power, security, and autonomy.

3. SEQUENCE OF THE SIMULATION – WHO DOES WHAT AND WHEN?

PHASE	TIME IN MINUTES	MINISTRIES	LOBBYING	PRESS (OPTIONAL)	TASKS OF THE GAME LEADER
INTRO-DUCTION	40	Listen Get together in groups			Presentation of the game: scenario, procedure, rules, distribution of roles
SET-UP		Read the "scenario" and specific "role profiles" copy templates			Distribute the "scenario" and "role profiles", allocate rooms, answer any questions that may arise
STRATEGY DISCUSSION	60 incl. break	Internal negotiation of policy goals Agreement on specific demands and a relevant strategy Internal distribution of roles in the group – who speaks to whom? Draw up a draft plan for the distribution of monies	Development of arguments for forthcoming negotiations Agreement on specific demands and a relevant strategy Draw up a draft plan for the distribution of monies	Development of an interview concept, suitable questioning; clarification of the internal distribution of roles	Answer any questions arising, provide assistance
INFORMAL NEGOTIATIONS	45	Meeting with the interest groups	Meeting with the other interest groups, exchange of views regarding positions Negotiations with the ministry officials	Interview interest groups and ministry officials and prepare an initial report in the form of a video	Ask the groups to decide who will do what Provide assistance Set up the room for the public hearing (horseshoe seating with ministries at the head and interest groups along the sides)
PUBLIC HEARING	45 incl. break	Ministry officials chair the hearing, invite the interest groups to state their positions and ask follow-up questions	Presentation of arguments and points of view Criticism of the points of view of the other groups	Start by showing the initial report Follow the hearing	Help the ministry officials to organise the hearing, ensure equal speaking times and the use of "appropriate language"
RESOLUTION AND ANNOUNCEMENT OF THE DECISION	10	Consultation between ministry officials and arrival at a consensual decision Announcement to the interest groups of the resolution adopted regarding the distribution of monies	Opportunity for final informal negotiations Break	Break Concluding statement on the negotiations and outcome	Support ministry officials if necessary
EVALUA-TION	20	Plenary session, possibly in groups and using special methods (e.g. pin board cards)			Key questions see chapter 7

4. STAKEHOLDERS IN THE GAME

The simulation is designed for between 10 and 25 participants
The following four lobbying groups are represented:
- Pro-Rail Alliance
- German Inland Shipping Association (BDB)
- German Road Haulage, Logistics and Waste Disposal Association (BGL)
- European Cycle Logistics Federation (ECLF)

There is also a ministerial team comprising the following relevant ministries:
- Federal Ministry of Transport and Digital Infrastructure (at least one participant)
- Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (at least one participant)

A press team can also be introduced depending on the number of participants.

Summary of how the groups could be divided

NUMBER OF PLAYERS	INTEREST GROUPS	MINISTRIES
10	4 teams of 2 participants	1 team of 2 participants
14	4 teams of 3 participants	1 team of 2 participants
19	4 teams of 4 participants	1 team of 3 participants
23	4 teams of 5 participants	1 team of 3 participants
25	4 teams of 5 participants	1 team of 5 participants

5. BEFORE THE GAME: MATERIALS, PREPARATION, AND PLANNING

A number of preparations will need to be made before the game starts.

1. Invitation of participants:
- A time frame of approximately four hours should be planned for.
- The invitation to the simulation could either keep the topic of the event secret in order to generate a surprise effect or alternatively mention the theme in advance. The latter approach would allow the participants to undertake their own preparations (e.g. by finding out about current transport policies or lobbyism in Germany).

2. Organisation of rooms and facilities:
- A large room to accommodate all participants
- Computer, projector, and screen
- If there is to be a press team, a camera capable of playing videos via projector will be required.
- Two to three smaller group rooms if possible

3. Printing and preparation of the materials for the game depending on the number of participants:
- Scenario – one copy per participant (see copy templates)
- Role profiles for the individual groups – one copy per group member (see copy templates)
- Name badges for each participant (optional)
- Table signs or door signs – one per group (optional)

6. DURING THE GAME – TIPS FOR THE GAME LEADER

- **You are the chair.** This means that you act as the host for the simulation. Your tasks include greeting the participants, explaining the course and rules of the game, and controlling the individual speeches made later. You may, for example, return to important arguments, break silences, or encourage more reticent participants to voice their opinions. Although your job is to foster dialogue between the teams at a language level, you should not intervene with regard to matters of contents.

- **You are also the timekeeper.** You will need to help the groups organise themselves by keeping an eye on the time. It might, for example, be useful to give the groups a 15-minute warning that the current phase of the simulation is about to come to an end. Of course, you are also authorised to adjust the schedule if necessary and then communicate this to the participants. The important thing is that you play through the game to its conclusion without any long interruptions (e.g. playing on two working days).

- **And you are the organiser.** All materials and rooms should be prepared as well as possible so that the simulation runs smoothly and the participants are able to concentrate on the contents. The "Course of the simulation" table lists your tasks separately and will assist you in your preparations.

7. AFTER THE GAME – TIPS FOR EVALUATING THE SIMULATION

The outcomes and course of the simulation are evaluated after the game. If possible, connections should be made with existing experiences. It is crucial to enable the participants to exit their roles as soon as the game finishes. You should collect their name badges to symbolise this. In order to facilitate a reflective discussion on the game and its outcome, it is important for the participants to assume their actual identities once more.

The evaluation essentially takes place across four phases.

1. Intuitive game analysis
- How did you get on with playing the game? What happened?
- How did you feel as a representative of the interest groups/ministries/press?

2. Reflection on the game and distancing
- How can the course of the game be explained?
- How far did you move away from your original objectives (starting position of your own group)?
- Was it difficult to reach agreement? If yes, why? If not, why not?
- Are you happy with the outcome from the point of view of your own role?
- Which arguments convinced you? Why?

3. Transfer to reality
- What differences and commonalities do you see between reality and the game situation?
- Are you familiar with similar situations or conflicts in your own life? If yes, how do you deal with these?
- In 2016, the federal government presented its 2030 Federal Transport Infrastructure Plan. The measures planned are set to cost a total of EUR 270 billion. 49 per cent of funding will be devoted to the roads, and 42 per cent and 9 per cent will be spent on the railways and waterways respectively. Have a look at the plan to find out which projects the federal government wishes to instigate.

4. Reflection
- How did you enjoy playing a simulation?
- What lessons do you think a "simulation" activity can provide for your everyday working life or professional future?

COPY TEMPLATES

1. Scenario

2. Role profiles

2.1 Federal Ministry of Transport and Digital Infrastructure
2.2 Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
2.3 Allianz pro Schiene (Pro Rail Alliance)
2.4 German Inland Shipping Association
2.5 German Road Haulage, Logistics and Waste Disposal Association
2.6 European Cycle Logistics Federation
2.7 Press (optional)

3. Name badges and table/door signs

3.1 Name badges
3.2 Table/door signs

SOURCES:

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit [Federal Ministry for the Environment, Nature Conservation and Nuclear Safety] (2015): *Klimaschutz in Zahlen. Fakten, Trends und Impulse deutscher Klimapolitik [Climate protection in figures. Facts, trends and impetuses of German climate policy].*

Bundesministerium für Verkehr und digitale Infrastruktur [Federal Ministry of Transport and Digital Infrastructure] (2017): *Aktionsplan Güterverkehr und Logistik – nachhaltig und effizient in die Zukunft [Action Plan for Freight Transport and Logistics – a sustainable and efficient future].*

Bundesverband Paket und Expresslogistik e. V. [Federal Association of Package and Express Logistics Service Providers] (2017): *KEP-Studie 2017 – Analyse des Marktes in Deutschland. Eine Untersuchung im Auftrag des Bundesverbandes Paket und Expresslogistik e. V. (BIEK) [Courier, express and package and parcel deliveries 2017 – an analysis of the market in Germany. An investigation conducted on behalf of the Federal Association of Package and Express Logistics Service Providers (BIEK)].*

planpolitik GbR (2015): *Der Güterverkehr von morgen – heute schon ein Thema! [Freight transport of tomorrow – a topic which needs to be tackled today!].*

Statistisches Bundesamt [Federal Statistical Office] (2017): *Statistisches Jahrbuch 2017. Kapitel 25 Transport und Verkehr [Statistical Year Book 2017. Chapter 25: Transport and traffic].*

INFORMATION ON STAKEHOLDERS IN THE SIMULATION

Allianz pro Schiene e.V. ["Pro-Rail Alliance"] *online at: https://www.allianz-pro-schiene.de*

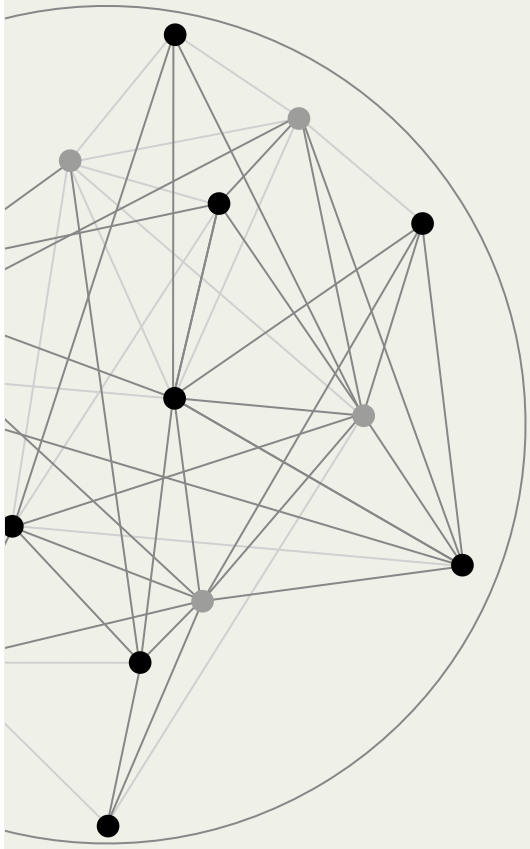
Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit [Federal Ministry for the Environment, Nature Conservation and Nuclear Safety] *online at: https://www.bmub.bund.de*

Bundesministerium für Verkehr und digitale Infrastruktur [Federal Ministry of Transport and Digital Infrastructure] *online at: http://www.bmvi.de*

Bundesverband der Deutschen Binnenschifffahrt e.V. [German Inland Shipping Association] *online at: https://www.binnenschiff.de/content/*

Bundesverband Güterkraftverkehr Logistik und Entsorgung e.V. [German Road Haulage, Logistics and Waste Disposal Association] *online at: http://www.bgl-ev.de/web/home/index.htm*

European Cycle Logistics Federation *online at: http://eclf.bike/index.html*



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