



# COMENIUS SCHOOLPARTNERSHIPS

## OPENING



## European CNC-Network „Train for EUROPE - RELOADED“





## WELCOME

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- ★ We are very pleased to welcome you!
- ★ More than 100 participants from 24 vocational schools out of 23 countries all over Europe are meeting this week in Kuopio, Finland
- ★ We are financed by the EU and supported by associated partners and politicians
- ★ We expect lots of exciting tasks, loads of work, excitement and of course – much fun
- ★ Looking forward to having a successful project work and great time here in Kuopio, Finland





## **SPECIAL THANKS TO THE GREAT ORGANISATION TEAM HERE IN KUOPIO**

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- ★ for hosting the Train Family
- ★ for all the preparatory organisation
- ★ for all the technical and personal support
- ★ for organising all the visits and tours
- ★ for offering cultural and culinary highlights
- ★ for all the enthusiasm and energy
- ★ for all the idealism and power



**Everything is done  
to have a perfect meeting!**

# PROJECT MINUTES

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*Lycée technique des Arts et Métiers*  
Luxembourg, Luxembourg

*Koning Willem I College*  
's-Hertogenbosch, Netherlands



*Byåsen videregående skole*  
Trondheim, Norway

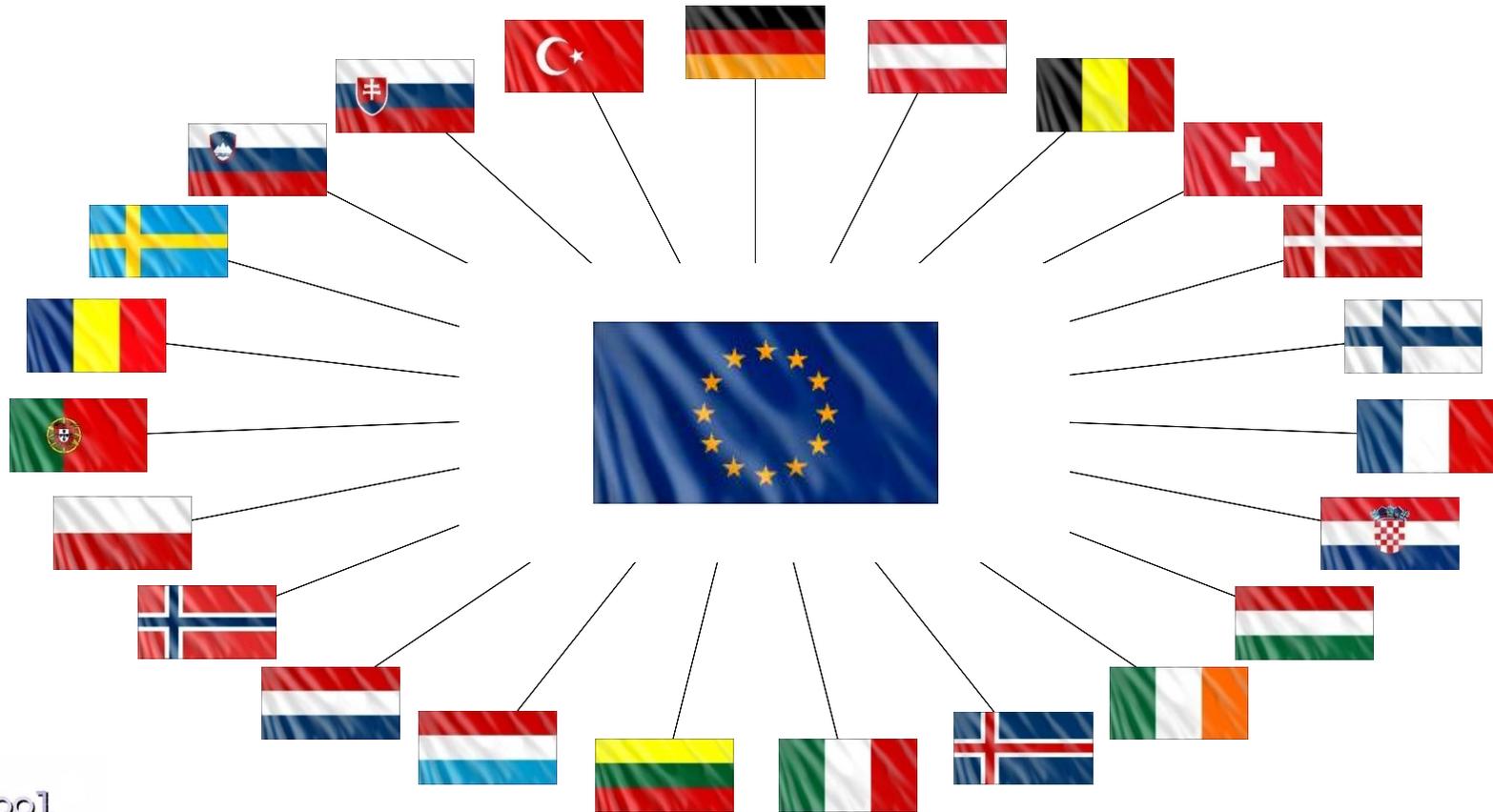


# EUROPE – A MULTILINGUAL CONTINENT





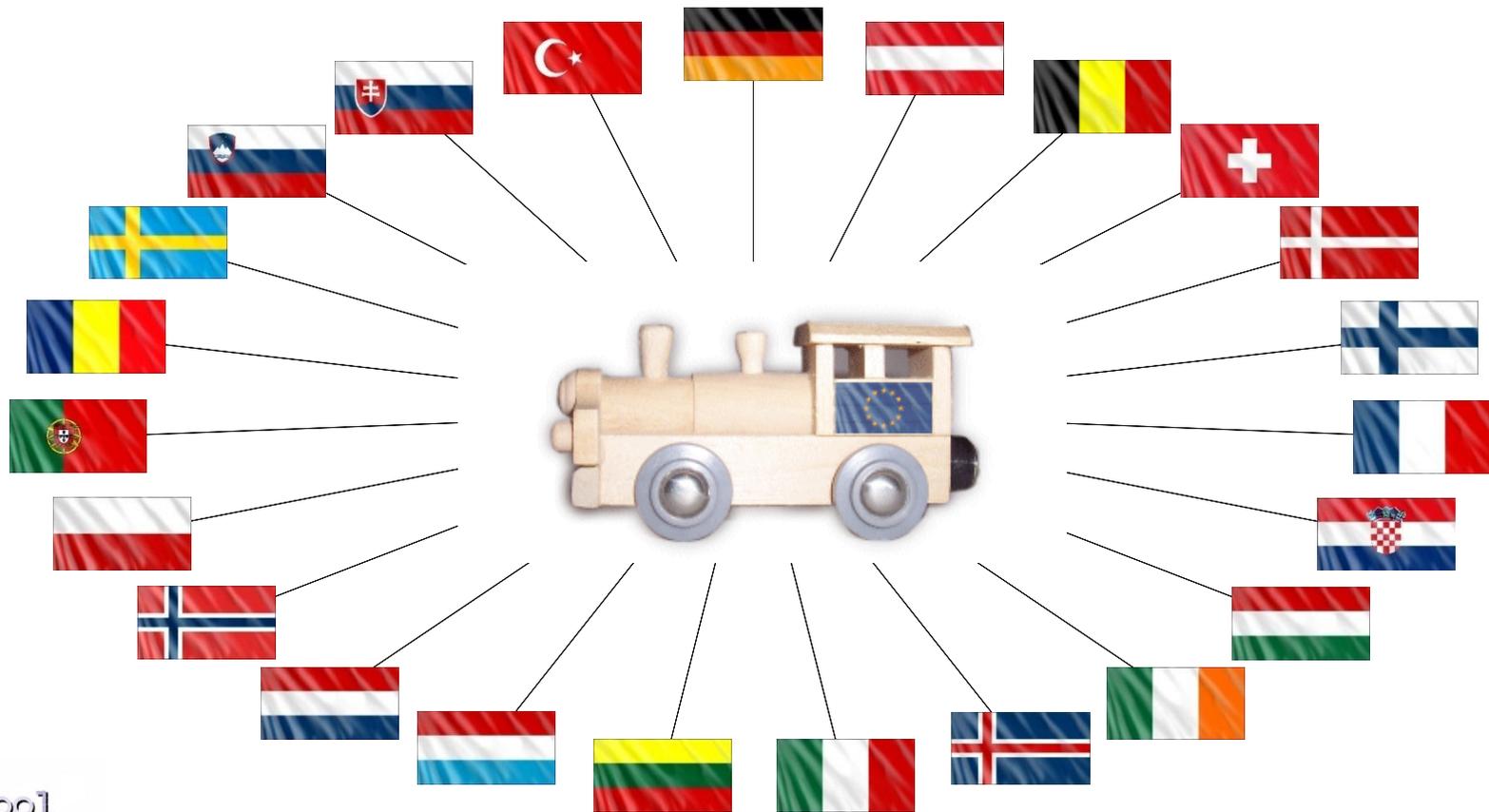
# 24 PARTNER SCHOOLS – OUT OF ALMOST ALL EUROPEAN COUNTRIES



The largest COMENIUS School Partnership ever supported by European Union.



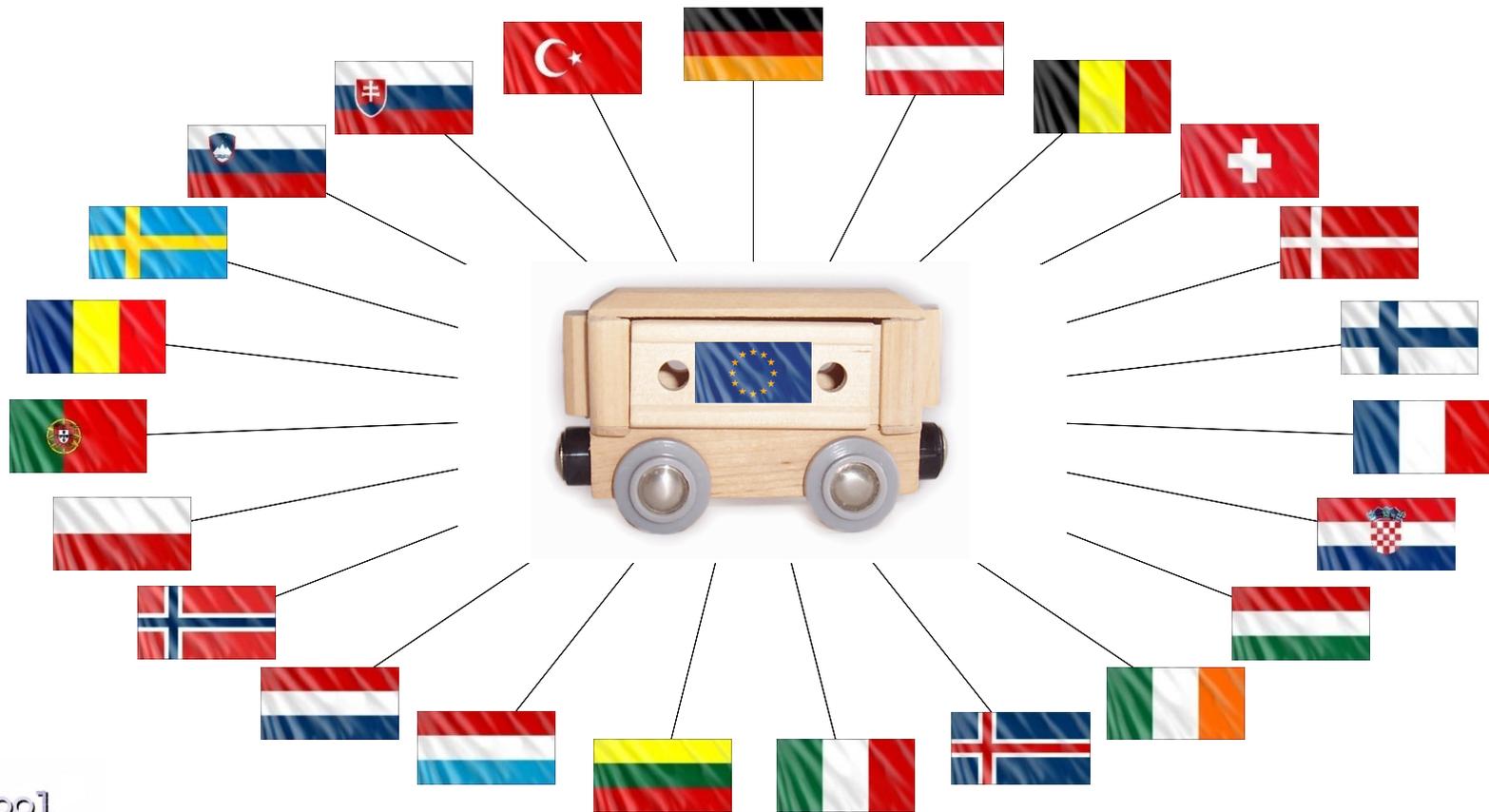
# 4 LOCOMOTIVES – WORKING TOGETHER BY DIVISION OF WORK



Each partner school will provide several parts of the locomotive.



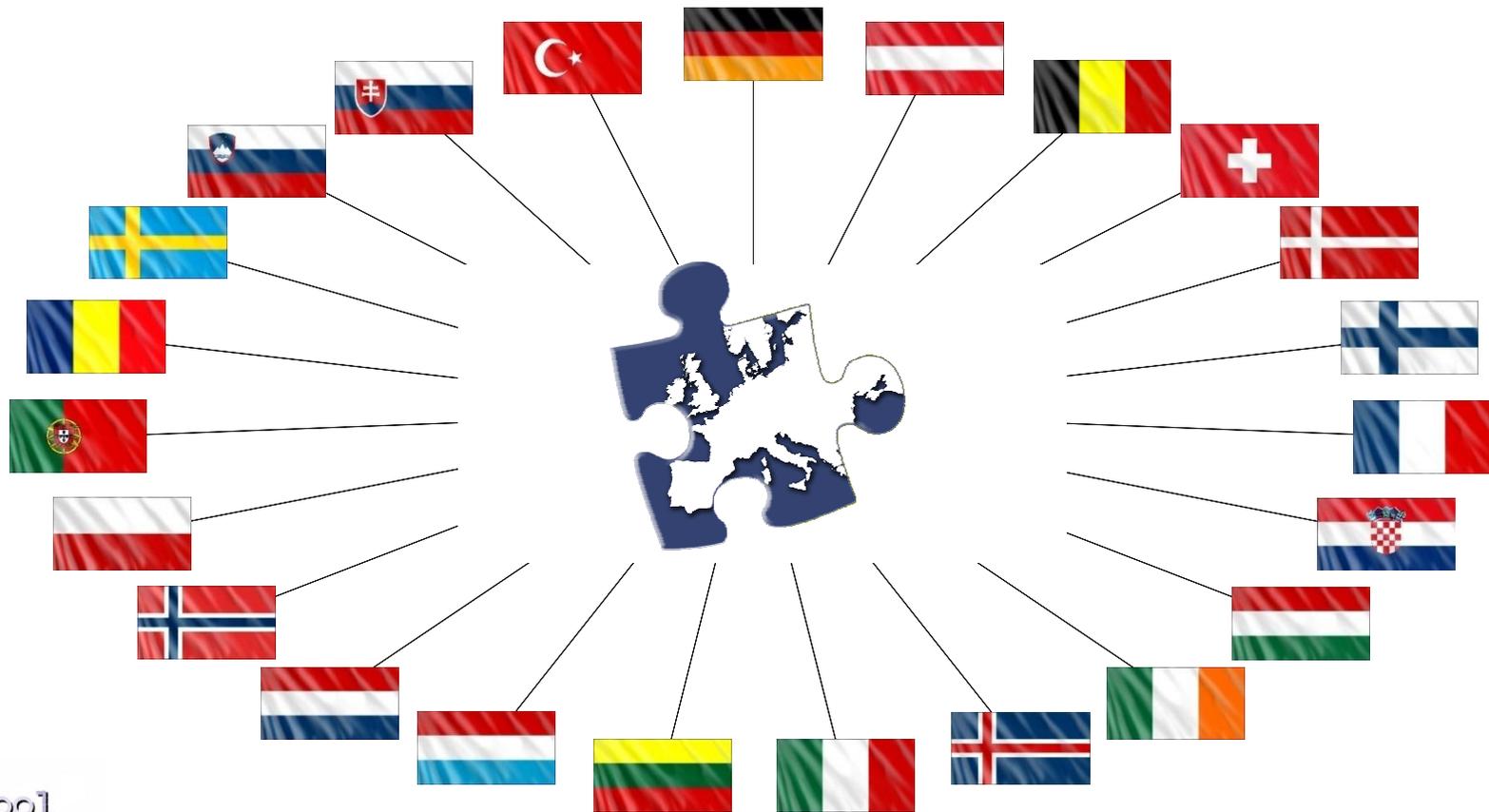
# 24 WAGONS – INDIVIDUAL PRODUCED



Common undercarriage and individual upper part connected by a clicking system.



# ANOTHER CHALLENGE – THE EUROPEAN ELECTRONIC MAP



Each wagon will be able to communicate with the "European Electronic Map".



# THE NEVER ENDING STORY: TRAIN FOR EUROPE - RELOADED

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- ★ Online Evaluation Tool
- ★ Online Questionnaire
- ★ Online Communication
- ★ Multilingual Technical Glossary
- ★ Gallery with photos, videos, CAD/CNC files
- ★ Producing DVD about project work
- ★ Teaching materials dealing with the production of the wagon undercarriage



HEIDENHAIN Workshops and Support



**K.I.S.S. –  
DEMAND OF OUR RESOLUTION**

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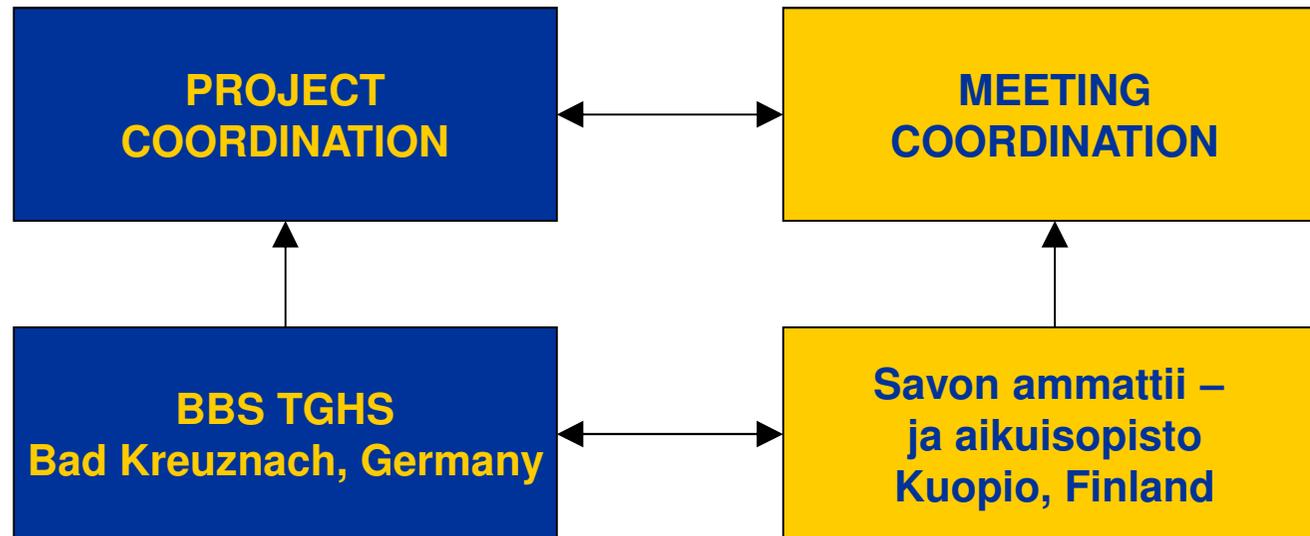
**KEEP IT SMART AND  
(NOT ONLY) SIMPLE**





# COORDINATION

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## COORDINATION PHILOSOPHY

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- ★ Not a project driven by the coordinator, but a project driven by all involved partners.
- ★ Not a project with one responsible boss, but a project with lots of responsible persons.
- ★ Not a project only for teachers, but especially a project for and from students.
- ★ Not a relaxed holiday project, but a project with lots of work load and fun.
- ★ Not a project for “Rambos”, but a project meant to improve team spirit.





## OUR MOTTO FOR THE WAGONS

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A wooden toy wagon with two grey wheels and a black axle. The text "WHAT WE HAVE DONE TO CONNECT PEOPLE" is written in red on the side of the wagon.

**WHAT WE HAVE DONE  
TO CONNECT PEOPLE**





# WORKLINES

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**WORKLINE A**  
Locomotive

**WORKLINE B**  
Wagon Components

**WORKLINE C**  
European Electronic Map

**WORKLINE D**  
Supporting Tasks





# WORKLOAD OF THE FIRST MEETING IN CROATIA

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Warming up

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Clarification of questions concerning organisation

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Agreement on a common motto for wagons

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Establishing work groups in the four planned  
worklines

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Brainstorming and planning of work

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Intercultural dialogue



# WORKLINES OF THE FIRST MEETING IN CROATIA

WORK GROUP MINUTES			
WORKLINE A LOCOMOTIVES	WORKLINE B WAGON COMPONENTS	WORKLINE C EUROPEAN ELECTRONIC MAP	WORKLINE D SUPPORTING TASKS
ACCORDING TO SCHEDULE, ACTIVITIES ARE STARTING IN MARCH 2012 (PORTUGAL MEETING)	<u>COUPLING</u> AT-FUL - AT-STP - PT	<u>WORK GROUP NO. 1</u> AT-STP - IE - LT - SI	<u>ONLINE EVALUATION TOOL</u>
	<u>TRACK PARCOURS</u> DE - LU - NO - SI	<u>WORK GROUP NO. 2</u> CH - IS - RO	<u>PHOTO/VIDEO COLLECTORS</u>
	<u>WHEEL DESIGN</u> HR - HU - IE - IT - SK	<u>WORK GROUP NO. 3</u> FI - HR - LU	<u>PHOTO GALLERY</u> (Minute still in progress)
	<u>COMMON UNDERCARRIAGE</u> CH - DK - HDH - PL	<u>WORK GROUP NO. 4</u> AT-FUL - DK - IT	<u>CAD/CNC FILE COLLECTORS</u>
	<u>CLICKING SYSTEM</u> LT - NL - TK	<u>WORK GROUP NO. 5</u> FR - NO - TK	<u>CAD/CNC GALLERY</u>
	<u>ELECTRONIC GIMMICKS</u> ELECTRONIC STUDENTS	<u>WORK GROUP NO. 6</u> DE - HU - PT	<u>VIDEO PUBLISHING</u>
	<u>RUNNING SMOOTHNESS</u> BE - FR - RO	<u>WORK GROUP NO. 7</u> BE - HDH - SK	<u>ONLINE QUESTIONNAIRE</u>
	<u>CREATIVE GROUP</u> FI - IS - SE	<u>WORK GROUP NO. 8</u> NL - PL - SE	<u>MULTILINGUAL TECHNICAL GLOSSARY</u>
			<u>TEACHING MATERIAL (WAGON PRODUCTION)</u>
			<u>ONLINE COMMUNICATION AND VIDEO CONFERENCE</u>



# WORKLOAD OF THE SECOND MEETING IN PORTUGAL

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Presentation of first proposals in the working groups  
of the working lines

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Carrying out of several decision processes in the  
working groups

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Setting obligatory the tasks and responsibilities in  
the working groups

---

Intercultural dialogue



# WORKLINES OF THE SECOND MEETING IN PORTUGAL



WORK GROUP MINUTES				
WORKLINE A LOCOMOTIVES	WORKLINE B WAGON COMPONENTS	WORKLINE C EUROPEAN ELECTRONIC MAP		WORKLINE D SUPPORTING TASKS
<u>LOCOMOTIVE 1</u> CH - IS - NL - PL - RO - SE	<u>COUPLING</u> AT-FUL - AT-STP - PT	<u>WORK GROUP NO. 1</u> AT-STP - IE - LT - SI	<u>WORK GROUP NO. I</u> AT-STP - IE - LT - SI CH - IS - RO	<u>ONLINE EVALUATION TOOL</u>
<u>LOCOMOTIVE 2</u> AT STP - DE - HU - IE - LT - PT - SI	<u>TRACK PARCOURS</u> DE - LU - NO - SI	<u>WORK GROUP NO. 2</u> CH - IS - RO		<u>PHOTO/VIDEO COLLECTORS</u>
<u>LOCOMOTIVE 3</u> AT FUL - DK - FI - HR - IT - LU	<u>WHEEL DESIGN</u> HR - HU - IE - IT - SK	<u>WORK GROUP NO. 3</u> FI - HR - LU (Minute still in progress)	<u>WORK GROUP NO. II</u> FI - HR - LU AT-FUL - DK - IT	<u>PHOTO GALLERY</u>
<u>LOCOMOTIVE 4</u> BE - FR - HDH - NO - SK - TK	<u>COMMON UNDERCARRIAGE</u> CH - DK - HDH - PL	<u>WORK GROUP NO. 4</u> AT-FUL - DK - IT		<u>CAD/CNC FILE COLLECTORS</u>
	<u>CLICKING SYSTEM</u> LT - NL - TK (Minute Tue still in progress)	<u>WORK GROUP NO. 5</u> FR - NO - TK	<u>WORK GROUP NO. III</u> FR - NO - TK DE - HU - PT	<u>CAD/CNC GALLERY</u> (Minute still in progress)
	<u>ELECTRONIC GIMMICKS</u> ELECTRONIC STUDENTS	<u>WORK GROUP NO. 6</u> DE - HU - PT		<u>VIDEO PUBLISHING</u>
	<u>RUNNING SMOOTHNESS</u> BE - FR - RO	<u>WORK GROUP NO. 7</u> BE - HDH - SK	<u>WORK GROUP NO. IV</u> BE - HDH - SK NL - PL - SE (Minute Fri still in progress)	<u>ONLINE QUESTIONNAIRE</u>
	<u>CREATIVE GROUP</u> FI - IS - SE	<u>WORK GROUP NO. 8</u> NL - PL - SE		<u>MULTILINGUAL TECHNICAL GLOSSARY</u>
				<u>TEACHING MATERIAL (WAGON PRODUCTION)</u>
				<u>ONLINE COMMUNICATION AND VIDEO CONFERENCE</u>



# WORKLOAD OF THE SECOND MEETING IN PORTUGAL

---

Presentation of first proposals in the working groups  
of the working lines

---

Carrying out of several decision processes in the  
working groups

---

Setting obligatory the tasks and responsibilities in  
the working groups

---

Intercultural dialogue



# WORKLINES OF THE THIRD MEETING IN SLOVENIA

WORK GROUP MINUTES			
WORKLINE A LOCOMOTIVES	WORKLINE B WAGON COMPONENTS	WORKLINE C EUROPEAN ELECTRONIC MAP	WORKLINE D SUPPORTING TASKS
<u>LOCOMOTIVE 1</u> CH - IS - NL - PL - RO - SE	<u>COUPLING</u> AT-FUL - AT-STP - PT (Minutes of Saturday and Monday still in progress)	<u>SUPERVISORS</u> AT-FUL - DK - FI - HR - IT - LU	<u>ONLINE EVALUATION TOOL</u>
<u>LOCOMOTIVE 2</u> AT STP - DE - HU - IE - LT - PT - SI	<u>TRACK PARCOURS</u> DE - LU - NO - SI (Minutes of Saturday and Monday still in progress)	<u>PANEL &amp; DESK</u>	<u>PHOTO/VIDEO COLLECTORS</u> (Minute still in progress)
<u>LOCOMOTIVE 3</u> AT FUL - DK - FI - HR - IT - LU	<u>WHEEL DESIGN</u> HR - HU - IE - IT - SK	<u>CONTROL SYSTEM</u>	<u>PHOTO GALLERY</u>
<u>LOCOMOTIVE 4</u> BE - FR - HDH - NO - SK - TK	<u>COMMON UNDERCARRIAGE</u> CH - DK - HDH - PL	<u>PRESENTATION</u>	<u>CAD/CNC FILE COLLECTORS</u>
	<u>CLICKING SYSTEM</u> LT - NL - TK		<u>CAD/CNC GALLERY</u>
	<u>ELECTRONIC GIMMICKS</u> ELECTRONIC STUDENTS		<u>VIDEO PUBLISHING</u>
	<u>RUNNING SMOOTHNESS</u> BE - FR - RO		<u>ONLINE QUESTIONNAIRE</u>
	<u>CREATIVE GROUP</u> FI - IS - SE		<u>MULTILINGUAL TECHNICAL GLOSSARY</u>
			<u>TEACHING MATERIAL (WAGON PRODUCTION)</u>
			<u>ONLINE COMMUNICATION AND VIDEO CONFERENCE</u> (Minute still in progress)



# WORKLOAD OF THE THIRD MEETING IN SLOVENIA

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Discussing aspects of technical drawings for  
wagons and locomotive

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Defining borderlines of European Electronic Map

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Evaluating and summing up work results for  
preparation of interim report

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Intercultural dialogue



# HOMework FI01 MINUTES

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- ★ Please send the minutes with your results, decisions and your visions of the work process from work lines B, C and D back to the project coordinator as soon as possible.

*comenius@cnc-network.eu*





# HOMework FI02

## STAY IN CONTACT IN YOUR GROUPS

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- ★ Please stay in close contact to the members of your work groups, especially to the representative.
- ★ Discuss, prepare and improve your ideas and visions for the meeting in Finland.





## HOMework FI03

# PHOTO, VIDEO, CAD/CNC GALLERY

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- ★ Please take care of all the photos, videos and drawings taken by all members of your delegation.





# HOMWORK FI04

## ONLINE COMMUNICATION

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- ★ Please register for SKYPE membership





# HOMework FI05

## NEWSPAPER ARTICLE

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- ★ Get into contact with the local media (newspaper, radio, TV) and send a copy to

*comenius@cnc-network.eu*





## HOMWORK FI06

# GET MEMBERSHIP OF THE CNC-FORUM

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- ★ Get membership of the CNC-Forum

... in order to be able to have a view to important documents including the possibility to upload and to share documents within your work group and within the project in total.

*<http://www.cnc-network.eu>*  
*[ID] Firstname Lastname*





## FURTHER HOMEWORK

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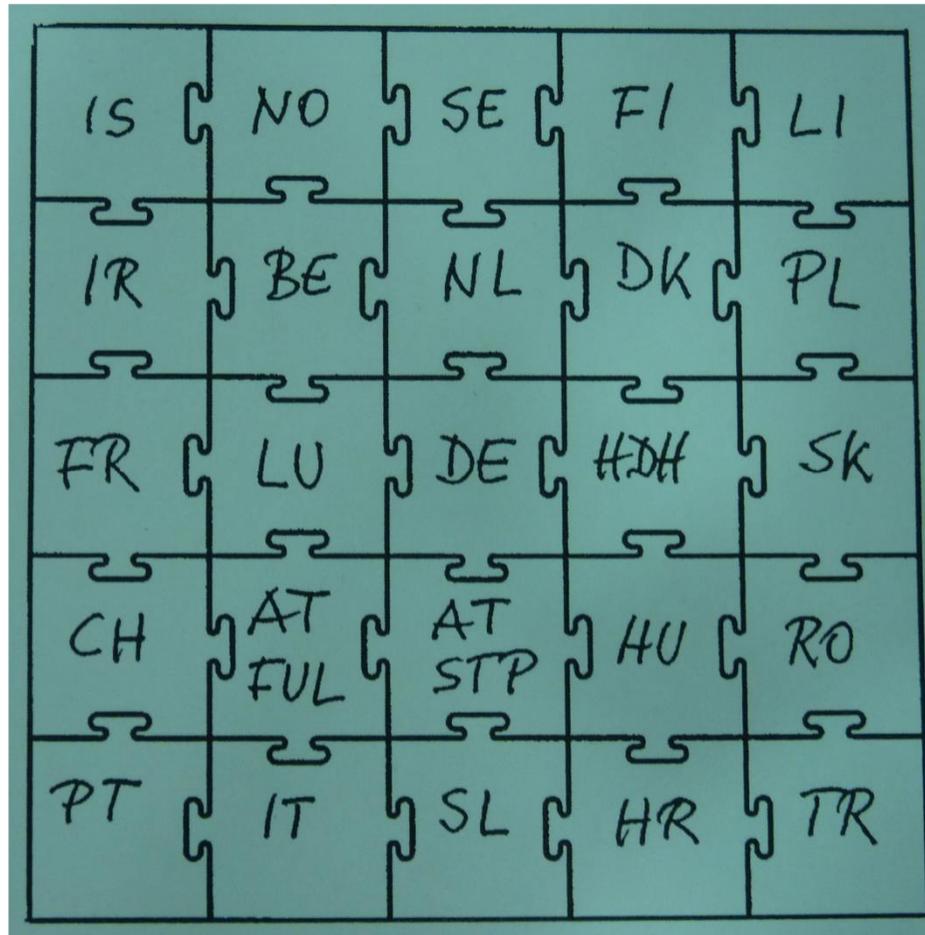
- ★ **HOMEWORK FI07**  
Produce 4x wheels with bearings for meeting in Finland (drawing will be published in forum in two weeks – step & pdf)
- ★ **HOMEWORK FI08**  
Produce your jigsaw puzzle piece without any engraving according to the drawing (published in the forum)
- ★ **HOMEWORK FI09**  
Get into contact with representatives of the European Union in your country asking them for an invitation to Strasbourg





## FURTHER HOMEWORK

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School  
on the way to  
Europe



## FURTHER HOMEWORK

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### ★ HOMEWORK FI10

#### Online Questionnaire

Each school prepares at least 2 questions with correct and incorrect answers for each of the following categories:

- cnc technology
- materials
- electrical engineering
- general knowledge about machine elements

You will find more info on the forum

**Deadline:** meeting in Finland





## FURTHER HOMEWORK

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### ★ HOMEWORK FI11

#### **Electronic Map – PowerPoint Presentation**

Template will be set in forum (end of May)

Ideas:

- presentation 30 seconds per school
- 6 slides → country, school, working group,  
3 slides about wagon based  
on common motto
- no sound, no animation, no films
- Check forum
- Check template and see how to do it.
- Prepare a proposal for Finland (PowerPoint)





## FURTHER HOMEWORK

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### ★ HOMEWORK FI12

### Multilingual Technical Glossary

- Log in on the moodle platform asap  
(have a look to the manual at ???)
- Please translate the words into your mother tongue (country's official language (Moodle) until November 1<sup>st</sup>, 2012





## FURTHER HOMEWORK

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### ★ HOMEWORK FI13 VIDEO PUBLISHING GROUP

- By the end of June we'll be collecting slideshows with music and animation and/or videos good to be uploaded on YouTube
- To contact us:  
*romina.biava@yahoo.it*





## FURTHER HOMEWORK

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### ★ HOMEWORK FI14 TRACK PARCOURS GROUP

- 3 schools make 10 straight segments each:  
[FI] – [TK] – [BE]
- All other schools make 6 bended segments
- Drawings including STEP-files will be made by Luxembourg and published before summer holidays start, which means before the 1<sup>st</sup> of June.



# WORKLOAD OF THE FOURTH MEETING IN FINLAND

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Agreeing on the CNC-programmes on base of  
technical drawings

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Testing electronic devices of European Electronic  
Map

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Creating a schedule for manufacturing the  
undercarriages of the wagons

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Intercultural dialogue



# AGENDA PART 1 OF THE MEETING IN FINLAND

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## SUNDAY

16<sup>TH</sup> SEPTEMBER 2012

## MONDAY

17<sup>TH</sup> SEPTEMBER 2012

→ 8:30 Transfer to school

## TUESDAY

18<sup>TH</sup> SEPTEMBER 2012

→ 8:30 Transfer to school

## ARRIVAL DAY

### Meeting Registration

Arrival and check-in at Kylpylä Hotelli Rauhalahdi

## WELCOME AND INITIAL DAY

9:00 **Good Morning – Welcome to Kuopio**

Welcome, meeting details and project update

13:00 **Lunch Break at School Restaurant**

14:15 **Workline A “Locomotive”** – Internal Review

15:45 **Workline B “Waggon Components”** – Internal Review

17:15 **Good Evening Flashlight**

18:00 **Cocktail Party**

## HARD WORKING DAY

9:00 **Good Morning Flashlight**

10:00 **Workline C “European Electronic Map”** – Internal Review

11:30 **Workline D “Supporting Tasks”** – Internal Review

13:00 **Lunch Break at School Restaurant**

14:15 **Workline A “Locomotive”** – Plenary Discussions

15:15 **Workline B “Waggon Components”** – Plenary Discussions

16:15 **Workline C “European Electronic Map”** – Plenary Discussions

17:15 **Workline D “Supporting Tasks”** – Plenary Discussions

18:15 **Good Evening Flashlight**





# AGENDA PART 2 OF THE MEETING IN FINLAND

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## WEDNESDAY

19<sup>TH</sup> SEPTEMBER 2012

→ 7:45 Coach Departure

## CULTURAL DAY - "An outing into the wilderness"

9:45 **Arrival to Metsäkartano, campfire coffee and info**

10:30 **Wilderness Activities Part 1**

12:45 **Lunch**

13:45 **Wilderness Activities Part 2**

17:00 **Save Journey back**

## THURSDAY

20<sup>TH</sup> SEPTEMBER 2012

→ 8:30 Transfer to school

## ANOTHER HARD WORKING DAY

9:00 **Good Morning Flashlight**

10:00 **Workline A "Locomotive" – Internal Discussions**

12:00 ~~11:30~~ **Workline B "Waggon Components" – Internal Discussions**

13:00 **Lunch Break at School Restaurant**

14:15 **Workline C "European Electronic Map" – Internal Discussions**

15:45 **Workline D "Supporting Tasks" – Internal Discussions**

17:15 **Good Evening Flashlight**



# AGENDA PART 3 OF THE MEETING IN FINLAND

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## FRIDAY

**21<sup>ST</sup> SEPTEMBER 2012**

→ 8:30 Transfer to school

## WORKING CLOSURE

9:00 **Good Morning Flashlight**

10:00 **Workline A "Locomotive"** – Further Steps

11:00 **Workline ~~B~~ "Waggon Components"** – Further Steps

12:00 **Workline ~~D~~ "European Electronic Map"** – Further Step

13:00 **Lunch Break at School Restaurant**

14:15 **Workline ~~E~~ "Supporting Tasks"** – Further Steps

15:30 **Review, Evaluation & Homework**

16:30 **Travelling back to Hotel by Ship**

20:00 **Farewell & Dinner**

## SATURDAY

**22<sup>ND</sup> SEPTEMBER 2012** Time to say goodbye to all participants and friends

## DEPARTURE DAY





## WORK LINE A – LOCOMOTIVE

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- ★ **Group No. 1**  
CH – IS – NL – PL – RO
- ★ **Group No. 2**  
AT STP – DE – HU – IE – LT – SI – PT
- ★ **Group No. 3**  
AT FUL – DK – FI – HR – IT – LU
- ★ **Group No. 4**  
BE – FR – HDH – NO – SK – TK





## WORK LINE B – WAGON COMPONENTS

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- ★ Coupling
- ★ Track Parcours
- ★ Wheel Design
- ★ Common Undercarriage
- ★ Clicking System
- ★ Electronic Gimmicks
- ★ Running Smoothness
- ★ Creative Group





## WORK LINE C – EUROPEAN ELECTRONIC MAP

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★ **Group No. 1**

**Supervisors** AT-FUL DK FI HR IT LU

★ **Group No. 2**

**Panel** DE PT SI IS AT-STP CH HDH

**Desk** SK SE IE TR

★ **Group No. 3**

**Control System** LT BE DE NL

★ **Group No. 4**

**Presentation** LT TR PL RO HU NO FR



## WORK LINE D – SUPPORTING TASKS

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- ★ Online Evaluation Tool
- ★ Photo/Video Collectors
- ★ Photo Gallery
- ★ CAD/CNC File Collectors
- ★ CAD/CNC Gallery
- ★ Video Publishing
- ★ Online Questionnaire
- ★ Multilingual Technical Glossary
- ★ Teaching Materials
- ★ Online Communication





# WORKLINES

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**WORKLINE A**  
Locomotive

**WORKLINE E**  
The last mile

**WORKLINE C**  
European Electronic Map

**WORKLINE D**  
Supporting Tasks





## WORK LINE E – „THE LAST MILE“

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- ★ Common Undercarriage Assistance Karpalo  
(drawing package, support, improvement)  
(CH-DK-HDH-PL)
- ★ Running Smoothness Controlling Conference  
(BE-FR-RO)
- ★ Upper Part Exchange C1234
- ★ DVD Production “Project Essentials”
- ★ Final Presentation C1233
- ★ EU / MEP – Contact Group A1205  
(DE-IR-AT-STP)
- ★ Public Relation C2202
- ★ Shirts & Stickers Metal MR





## DATES

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- ★ First Meeting in Croatia  
14<sup>th</sup> until 20<sup>th</sup> of November 2011 (done)
- ★ Second Meeting in Portugal  
5<sup>th</sup> until 11<sup>th</sup> of March 2012 (done)
- ★ Third Meeting in Slovenia  
10<sup>th</sup> until 16<sup>th</sup> of May 2012 (done)
- ★ Fourth Meeting in Finland  
16<sup>th</sup> until 22<sup>nd</sup> of September 2012 (just now)
- ★ Fifth Meeting in Austria, St. Pölten  
30<sup>th</sup> January until 5<sup>th</sup> February 2013 (fixed)
- ★ Final Meeting (DE-BE-NL-LU-CH → EP)  
April/May/June 2013



# FINAL MEETING – HOST SCHOOLS

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BE x

NL ?

LU ✓

DE ✓

CH ✓





## FINAL MEETING – EP SESSION WEEKS

- (1) April, 16<sup>th</sup> to 18<sup>th</sup>, 2013**
- (2) May, 21<sup>st</sup> to 23<sup>rd</sup>, 2013**
- (3) June, 11<sup>th</sup> to 13<sup>th</sup>, 2013**
- (4) July, 02<sup>nd</sup> to 04<sup>th</sup>, 2013**





## DATE VOTING RESULTS

	✓	○	x
<b>April, 16. - 18.</b>	<b>15</b>	<b>9</b>	<b>1</b>
<b>May, 21. - 23.</b>	<b>17</b>	<b>3</b>	<b>5</b>
<b>June, 11. - 13.</b>	<b>12</b>	<b>6</b>	<b>7</b>
<b>July, 02. - 04.</b>	<b>10</b>	<b>5</b>	<b>10</b>



Expected number of participants: 186,5



# COMENIUS SCHOOLPARTNERSHIPS

## LET'S MOVE THE TRAIN FOR EUROPE



### European CNC-Network „Train for EUROPE - RELOADED“

