

<b>Meeting Description</b>	Fourth Project Meeting in Kuopio (Finland)
<b>Meeting hosted by</b>	Savon ammattii - ja aikuisopisto
<b>Minute written by</b>	[NO] Stig Mårstad

<b>Date / Place / Time</b>	<b>Activities / Results / Points of importance</b>
<p><b>HARD WORKING DAY</b> <b>Tuesday</b> <b>18<sup>th</sup> September 2012</b></p> <p>Hotel 08:30</p> <p>School Room No. AUDITORIUM 09:00</p> <p>10:00</p> <p>11:30</p>	<p><b>Transfer to school</b></p> <p>Good morning flashlight:</p> <ul style="list-style-type: none"> <li>• Everyone delivers tracks at the stage so we can assemble the track to the evening flashlight.</li> <li>• Concern about workload, there is no prototype for the electronics</li> <li>• Electronics must be tested and work at St. Pölten</li> <li>• Sightseeing around school 10:00 and 14:30 starting from outside conference hall</li> </ul> <p><b>WORK LINE C- EUROPEAN ELECTRONIC MAP</b></p> <ul style="list-style-type: none"> <li>• Group No. 1 <b>Supervisors</b> A4207</li> <li>• Group No. 2 <b>Panel &amp; Desk</b> DE-PT-SI-IS-ATSTP-CH-HDH - SK-SE-IE-TR C1234</li> <li>• Group No. 3 <b>Control System</b> LT-BE-DE-NL Conference room</li> <li>• Group No. 4 <b>Presentation</b> LT-TR-PL-RO-HU-NO-FR Room “Karpalo”</li> </ul> <p><b>WORK LINE D – SUPPORTING TASKS</b></p> <ul style="list-style-type: none"> <li>• Online Evaluation Tool A4207</li> <li>• Photo/Video Collectors Dir. Cabinet</li> <li>• Photo Gallery C1234</li> <li>• CAD/CNC File Collectors C1234</li> <li>• CAD/CNC Gallery Conference</li> <li>• Video Publishing Karpalo</li> <li>• Online Questionnaire Karpalo</li> <li>• Multilingual Technical Glossary Metal Dep.</li> <li>• Teaching Materials Register R.</li> <li>• Online Communication Hall</li> </ul>

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14:15	<p><b>Work line A – LOCOMOTIVE Plenary discussion</b></p> <p><b>LOCO 1 Presentation</b></p> <ul style="list-style-type: none"> <li>• Front axle holder</li> <li>• Axles of steel and block of aluminium because it glides better</li> <li>• Poland delegation is not here but will make a modern look (group think it's a problem that the Polish delegation is not present)</li> </ul> <p><b>LOCO 2 Presentation</b></p> <ul style="list-style-type: none"> <li>• Students at inventor class so teachers are presenting</li> <li>• There is a discussion about height of wheels and differential</li> <li>• Differential and drive to both axels</li> <li>• Differential dimensions are needed ASAP.</li> <li>• 3 Different motors are considered and the smallest and strongest is selected.</li> <li>• Chassi by [DE] is not manufactured yet but will be modern looking.</li> <li>• Bogie must be adjusted [AT] and wheels has to be adjusted [HU]</li> </ul> <p><b>LOCO 3 Presentation</b></p> <ul style="list-style-type: none"> <li>• Has made working prototype, min and max speed are tested</li> <li>• Friction problem, gear box seized, to little countersink on one of the screws, was fixed yesterday and will be tested again this evening</li> <li>• Upper part will be designed after the mechanical is ready</li> </ul> <p><b>LOCO 4 Presentation</b></p> <ul style="list-style-type: none"> <li>• The French delegation will not arrive until tomorrow and the group has to wait for preassembly and testing</li> </ul> <p>Kari says that if you write your name on the Heidenhain classes you must go and be there at the right time! Because:</p> <p><b>IN FINLAND WE HAVE A CLOCK!</b> (and we use it)</p> <p>Heinz: Very happy that there is a working locomotive, the rest have to work hard. Use the holiday too work!</p> <p><b>Work line B – Wagon components Plenary discussion</b></p> <ul style="list-style-type: none"> <li>• Coupling group: Shows working model, "KISS" from plenum.</li> <li>• Track Group: Has little more than half of tracks ready and the rest will be ready for Austria.</li> <li>• Wheel group: Change of design yesterday, less clearance on the wheels to give better stability, bigger O-ring for more pressure between bearing and axle. Solution on how axle will be fixed to wagon is still missing.</li> </ul>
15:30	<p><b>Coffee Break</b></p>
15:45	<p><b>Work line B continues...</b></p> <ul style="list-style-type: none"> <li>• Clicking system group: The interface between under/upper carriage need some changes because too small dimensions have been used.</li> <li>• Electronic gimmicks group: All electronic in upper part will be 12V and they will make power supply only.</li> <li>• Running smoothness group: Will share results on forum soon, must do some tests when the French delegation arrives tomorrow. If tests are ok, lighter loco can be made.</li> <li>• Creative group: There will be a vote for best sticker in Austria.</li> </ul>

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17:15	<p>Heinz:</p> <p>Coupling group need more time, small mistake but will be ready until Wednesday.  Not enough tracks, take care of homework!  Common undercarriage needs to coordinate with clicking system, should be ready until Thursday.  Hope Work Line B will be closed in Austria.  We should have more electronic students in Austria.  Maximum 2 Kg weight on each wagon?  We now stop work line B and start work line E “The Last Mile”  Work line B will only be a final check (assembly session) in Austria.</p> <p><b>Work line C – European Electronic Map Plenary discussion</b></p> <ul style="list-style-type: none"> <li>• Control group: Group has tested Bluetooth (BT) and radio frequency (RF) and chosen RF. Not decided where electronic will be placed in the wagon, but two schools that are close to each other and can meet should do this task. Cost for BT is between 75 – 150 EUR for each wagon and RF system is about 20 EUR in total. Group will make program and system will start PPT both auto and manual sequences, group will decide which program we will use.</li> <li>• Panel &amp; desk group: Sweden and Slovakia have made prototype desk and stand, 11 schools have parts to the puzzle and 90% of these fit. The puzzle will be transparent and with a red light, country code with three letters 10mm height and borderline of your country. 15 mm from left and 10mm from top is the point in the middle of the first letter. There will be a discussion Thursday, if there will be two or three letters and maybe a dot where the school is.</li> <li>• Presentation: Template is made and you will find it on the forum, 6 slides and 5 seconds on each slide, don't put more than the brain can absorb, have USB stick with your presentation with you to Austria, be aware of copyright.</li> </ul> <p><b>Work line D – Supporting Tasks Plenary discussion</b></p> <ul style="list-style-type: none"> <li>• Online Evaluation Tool: Google docs, same as in Celje.</li> <li>• Photo and Video Collectors: Will provide Picasa address on Thursday.</li> <li>• Photo Gallery: Every group must chose 30 pictures and upload them.</li> <li>• CAD/CNC File Collectors: Responsible persons must upload CAD files to gallery.</li> <li>• CAD/CNC Gallery: Responsible person for each group has access, start uploading or contact Flemming [DK].</li> <li>• Video Publishing Group: Will put film from Celje on YouTube.</li> <li>• Online Questionnaire: Give questions to Goga, deadline Wednesday, check homework, and check if you can access Moodle.</li> <li>• Technical Dictionary Group: Problem with Moodle, as soon as words are online you have to translate.</li> <li>• Teaching Material: Step by step instruction will be finished end of January.</li> <li>• Online Communication Group: Representative of every group sets up an e-mail list and sends to this group. Upload your own photo on forum, check the minutes and check forum about Skype.</li> </ul>