

Meeting Description	Fourth Project Meeting in Kuopio (Finland)
Meeting hosted by	Savon ammattii - ja aikuisopisto

Date / Time / Place	Monday 17 th September 2012
Name of Workline	Workline A - Locomotive
Name of Workgroup	Group 1

Representative workgroup member	[NL] Tonnie van Dongen
Co-representative workgroup member	[CH] Janick Sidler
Co-representative workgroup member	[RO] Voicu Cristiana, Guta Gabriela

Further workgroup members	[IS] Ellert Danelíusson, Jón Hjaltalín Ólafsson
	[NL] Terence van Acquoij, Marc van Erp, Kevin Vogels
	[CH] Romana Gander, Marc Schibig
	[SE] Sofia Fjällborg, Petra Olsson, Jesper Degenbjörk, Benjamin Karinen, Jesper Keskitalo, Stig Nartijärvi, Pontus Näslund
	Poland did not attend the meeting in Kuopio

Minute written by	[NL] Gerard-Jan van Dun
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Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance	Responsible school(s) or person(s) incl. deadlines
<p>NL: The electromotor is ready; it just needs a finishing touch. NL Agrees to make a PCB of the power supply.</p> <p>The tail-end bogie needs a finishing touch as well but the prototype works well.</p> <p>CH: The front bogie has been made by Switzerland.</p> <p>SE will be responsible for the 12 V battery.</p> <p>IS: The bearings will not be changed. The drawing will be adjusted. RO made the wheel. They changed the diameter from 50 to 40. The material will be copper and the radius is 6 mm.</p> <p>The wheel design for the tail-end bogie will be discussed in the next meeting. The problem is that tracks and wheels do not match; wheels are 86 and tracks are 90.</p> <p>Questions for the next meeting: -Who made the wheel axles? -Who made the undercarriage for the locomotive? -The upper part would be made by Poland but they are absent.</p>	<p>SE ->12 volts battery NL ->PCB IS -> Adjustment drawing</p>

Meeting Description	Fourth Project Meeting in Kuopio (Finland)
Meeting hosted by	Savon ammattii - ja aikuisopisto

Date / Time / Place	20 th September 2012, Room No. A4202, 21 st September 2012, Room “Karpalo”
Name of Workline	Workline A - Locomotive
Name of Workgroup	Group 1

Representative workgroup member	[NL] Marc van Erp
Co-representative workgroup member	[CH] Janick Sidler
Co-representative workgroup member	[NL] Kevin Vogels

Further workgroup members	[NL] Gerard-Jan van Dun, Terence van Acguoij
	[IS] Jón Hjaltalin Olafsson, Ellert Daneliusson
	[SE] Carina Loden, Mattias Mella, Kent Nystrom and students
	[RO] Cristiana Voicu
	[CH] Marcel Krusi, Janick Sidler, Romana Gander, Marc Schibig

Minute written by	[RO] Gabriela Guta
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Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance	Responsible school(s) or person(s) incl. deadlines
<p>Thursday 20th September 2012</p> <p>The members of the group have discussed about the following:</p> <ul style="list-style-type: none"> - material of the under part – aluminium was suggested for smoothness reasons, because steel is heavier than aluminium; - idea: axes made of aluminium, bogies made of steel; - Poland has to manufacture the undercarriage – they will be contacted because they were not present in Kuopio, to find out what they have done so far, if something was done; - the cover – an idea from Iceland – to be made of plastic; - the size of the battery and the height of the motor have to be known exactly before any drawings are made; - Switzerland will make the drawings and Iceland will manufacture the cover. The drawings will be posted on the forum; - size of the battery: 132 – height, 70 – weight, 115 – length; 	

Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance	Responsible school(s) or person(s) incl. deadlines
<p>The following decisions have been taken:</p> <ul style="list-style-type: none"> - change the drawings – the new drawings for the bogie will be made by Switzerland (Janick Sidler), Netherlands (Terence Van Acquoij), and Sweden (Benjamin Karinen) - discussion about each drawing, what to adjust – finished by the meeting in Austria; - Iceland will get in contact with Poland, and Poland should contact Romania for the wheels; - Romania should change the radius of the wheels from 8 to 6 – 8 pieces - Everything that changes, will be posted on forum. <p>Friday 21st September 2012</p> <p>Further discussion and homework</p> <ul style="list-style-type: none"> - the front bogie – aluminium 0.5 kilos = lighter than steel; drafts will be made (drawings) - tail bogie – the same system as for the front bogie; drafts will be made (drawings) - undercarriage – ideas about the best material: steel or stainless steel (the second is more expensive); drafts will be made (drawings) - the upper part – a draft was sent to Iceland in PDF and Step - axles – new drawings needed and to decide on the material – steel was chosen - wheels – new drawings, 4 front, 4 tail (2 different drafts will be made); also, a solution is needed for the tail wheels (for further discussion on Skype) - wheels – made of brass (cheaper than bronze) - a solution for the coupling system needed; for the back plate – steel or stainless steel (Switzerland can do it) - Sweden must bring to Austria the battery and enough wires <p>Who will do what?</p> <ul style="list-style-type: none"> - front bogie – Switzerland - tail bogie + engine – Netherlands - undercarriage – Poland (to be contacted by Iceland) - the upper part – Iceland - axles – Netherlands - wheels – Romania - coupling system – Switzerland will ask Austria - back plate – Switzerland - battery and wires – Sweden - axles and wheels – Skype contact between Netherlands, Switzerland and Sweden - the engine – brought by Netherlands - Netherlands will make the PCP - distance rings – Netherlands - extra weight for the locomotive might be needed, approximately 7 kilos; a simple draft will be made by Switzerland and it will be tested in Austria - the colour of the upper part – clear, and it remains to be painted - locking rings needed – maybe made by Romania; if not possible, it will be discussed on forum. 	<p>The new drawings for the bogie will be made by Switzerland (Janick Sidler), Netherlands (Terence Van Acquoij) and Sweden (Benjamin Karinen)</p>