

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

<b>Date / Time / Place</b>	Monday, 17 <sup>th</sup> September 2012, Room No. C1234
<b>Name of Workline</b>	Workline A – Locomotive
<b>Name of Workgroup</b>	Group 2

<b>Representative workgroup member</b>	[IE] John O'Neill
<b>Co-representative workgroup member</b>	

<b>Further workgroup members</b>	[IE] George Ryan, Jack O'Neill, Andrew Plunkett, Oscar Burke, Ruben Collins, Brendan Doherty
	[HU] Norbert Zsido, Daniel Troppert
	[PT] Carlos Coimbra, Joao Martins, Paulo Carreira,
	[SI] Roman Zupanc, Feliks Lednik, Sašo Goubar, Miha Smodiš, Simona Vincelj
	[AT-STP] Friedrich Wilhelm, David Burisch, Matthias Kirbes, Stefan Wenighofer, Bernd Gutmann, Günter Amstätter
	[DE] Bernd Alles, Jörg Fritsch, Carla de Silva, Katrin Langel, Lukas Groth, Merlin Platz, Mike Fopke
	[LT] Edvinas Zilionis, Rita Jakstiene, Saulius Mereckas, Irmantas Matulaitis, Haroldas Jotautas

<b>Minute written by</b>	[SI] Simona Vincelj
--------------------------	---------------------

<b>Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance</b>	<b>Responsible school(s) or person(s) incl. deadlines</b>
<p>John O'Neill gave a short overview of the work done so far.</p> <p><b>The Chassis</b> German team presented their proposal of the chassis with measurements. A decision on the measurements of the wheels must be made. German's proposal is 38 mm in diameter. The chassis should be just slightly shaped at the wheels.</p> <p><b>The bogies</b> Austrian (STP) team presented their drawings. They have been in contact with German team. They think that the height must be changed and they should be put a bit higher.</p> <p><b>The differential(s)</b> The Irish team showed the differential ordered by internet, which isn't complete yet. They also showed the differential from a radio controlled cars - useless because it's too big. When they get the complete differential, the dimensions will be put on the forum.</p>	

Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance	Responsible school(s) or person(s) incl. deadlines																
<p>Decision: single differential, four wheel drive. We'll work on the transmission to both axles later on.</p> <p><b>The motor</b> Slovenian team thanked Mr Friedrich Wilhelm for providing the motors. Problems: they don't have the exact dimensions yet. They showed three different motors:</p> <p>Motors</p> <table border="1" data-bbox="188 510 938 645"> <thead> <tr> <th></th> <th>TORQUE</th> <th>SPEED</th> <th>SIZE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>203 Nm</td> <td>22,000</td> <td>big</td> </tr> <tr> <td>2</td> <td>245 Nm</td> <td>15,000</td> <td>small</td> </tr> <tr> <td>3</td> <td>105 Nm</td> <td>14,000</td> <td>big</td> </tr> </tbody> </table> <p>They also presented specifications of the battery: cheap, heavy, made of lead, fits to the chassis, rechargeable.</p> <p><b>The Housing</b> Lithuanian team said that the housing could be easily adjusted to any further demands. They showed the model made on Portugal drawings (wooden model). The lower straight part should be raised for 10-15 mm.</p> <p><b>The wheel</b> The Hungarian team presented two different designs of the wheel and axle, and connections to bogie. Front wheels will come with bearings. Rear wheels will have bearings inside the connection element to bogie.</p> <p>Final decisions will be made tomorrow.</p>		TORQUE	SPEED	SIZE	1	203 Nm	22,000	big	2	245 Nm	15,000	small	3	105 Nm	14,000	big	
	TORQUE	SPEED	SIZE														
1	203 Nm	22,000	big														
2	245 Nm	15,000	small														
3	105 Nm	14,000	big														

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

<b>Date / Time / Place</b>	Thursday, 20 <sup>th</sup> September 2012, Room No. C1234
<b>Name of Workline</b>	Workline A – Locomotive
<b>Name of Workgroup</b>	Group 2

<b>Representative workgroup member</b>	[IE] John O'Neill
<b>Co-representative workgroup member</b>	

<b>Further workgroup members</b>	[IE] George Ryan, Jack O'Neill, Andrew Plunkett, Oscar Burke, Ruben Collins, Brendan Doherty
	[HU] Norbert Zsido, Daniel Troppert
	[PT] Carlos Coimbra, Joao Martins, Paulo Carreira,
	[SI] Roman Zupanc, Feliks Lednik, Sašo Goubar, Miha Smodiš, Simona Vincelj
	[AT-STP] Friedrich Wilhelm, David Burisch, Matthias Kirbes, Stefan Wenighofer, Bernd Gutmann, Günter Amstätter
	[DE] Bernd Alles, Jörg Fritsch, Carla de Silva, Katrin Langel, Lukas Groth, Merlin Platz, Mike Fopke
	[LT] Edvinas Zilionis, Rita Jakstiene, Saulius Mereckas, Irmantas Matulaitis, Haroldas Jotautas

<b>Minute written by</b>	[SI] Simona Vincelj
--------------------------	---------------------

<b>Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance</b>	<b>Responsible school(s) or person(s) incl. deadlines</b>
<p>John O'Neill opened a discussion to establish the facts about the locomotive parts (what we know, what we don't know and what we have to do)</p> <p><b>The chassis</b> We know:</p> <ul style="list-style-type: none"> <li>- dimensions 106 x 400</li> <li>- material aluminium</li> <li>- bogie position and size</li> </ul> <p>We don't know:</p> <ul style="list-style-type: none"> <li>- position/size of battery, motor, drives</li> </ul> <p><b>The bogie</b> We know:</p> <ul style="list-style-type: none"> <li>- dimensions</li> <li>- material steel</li> </ul> <p>We don't know:</p> <ul style="list-style-type: none"> <li>- axle size</li> </ul>	<ul style="list-style-type: none"> <li>➤ [DE]</li> <li>➤ [SI] gives the information to [DE] by the end of October</li> <li>➤ [AT STP]</li> </ul>

Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance	Responsible school(s) or person(s) incl. deadlines
<p><b>The wheels</b> We know:</p> <ul style="list-style-type: none"> <li>- material aluminium</li> <li>- dimensions</li> </ul> <p>We don't know:</p> <ul style="list-style-type: none"> <li>- the hole in the centre <math>\varnothing 6/8</math> mm</li> </ul> <p><b>The motor</b> We know:</p> <ul style="list-style-type: none"> <li>- battery size, shape, weights</li> <li>- electronic control</li> <li>- motor we'll have 3000 Rpm</li> <li>- material aluminium</li> <li>- dimensions</li> </ul> <p>We don't know:</p> <ul style="list-style-type: none"> <li>- no motor yet</li> <li>- drive to differential</li> </ul> <p><b>The differential(s)</b> We know:</p> <ul style="list-style-type: none"> <li>- all dimensions</li> <li>- ratio =3:1</li> </ul> <p>We don't know:</p> <ul style="list-style-type: none"> <li>- position on chassis</li> <li>- dimensions of rear "bogie"</li> </ul> <p><b>The Housing</b></p> <ul style="list-style-type: none"> <li>- 3 mm thick (20 mm skirt - the vertical section)</li> <li>- total height = 120 mm (400x100?) (PT + LT)</li> </ul>	<ul style="list-style-type: none"> <li>➤ [IR] checks this with [AT STP]</li> <li>➤ Axle and the wheel tolerance [AT STP] and [HU]</li> <li>➤ [SI]</li> <li>➤ Info to [DE]</li> <li>➤ [SI] + [IE]</li> <li>➤ [IE]</li> <li>➤ [IE] and [HU] have to decide on axle size</li> <li>➤ the housing [PT]+ [LT]</li> </ul>

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

<b>Date / Time / Place</b>	Friday, 21 <sup>st</sup> September 2012, Room No. C1234
<b>Name of Workline</b>	Workline A – Locomotive
<b>Name of Workgroup</b>	Group 2

<b>Representative workgroup member</b>	[IR] John O'Neill
<b>Co-representative workgroup member</b>	

<b>Further workgroup members</b>	[IR] George Ryan, Jack O'Neill, Andrew Plunkett, Oscar Burke, Ruben Collins, Brendan Doherty
	[HU] Norbert Zsido, Daniel Troppert
	[PT] Carlos Coimbra, Joao Martins, Paulo Carreira,
	[SI] Roman Zupanc, Feliks Lednik, Sašo Goubar, Miha Smodiš, Simona Vincelj
	[AT-STP] Friedrich Wilhelm, David Burisch, Matthias Kirbes, Stefan Wenighofer, Bernd Gutmann, Günter Amstätter
	[DE] Bernd Alles, Jörg Fritsch, Carla de Silva, Katrin Langel, Lukas Groth, Merlin Platz, Mike Fopke
	[LT] Edvinas Zilionis, Rita Jakstiene, Saulius Mereckas, Irmantas Matulaitis, Haroldas Jotautas

<b>Minute written by</b>	[SI] Simona Vincelj
--------------------------	---------------------

<b>Description of work progress: Topics / Tasks / Results / Decisions / Facts of importance</b>	<b>Responsible school(s) or person(s) incl. deadlines</b>
<p>John O'Neill gave a short overview of the work done so far. We watched the video presentation of the locomotive group.</p> <p><b>Decisions made:</b></p> <p><b>The wheels</b></p> <ul style="list-style-type: none"> <li>- diameter of the wheels <math>\varnothing 42</math>,</li> <li>- the size of the axle <math>\varnothing 5</math></li> <li>- axle to axle 50mm [HU] + [IE]</li> </ul> <p><b>The bogie</b></p> <p><b>The chassis</b></p> <ul style="list-style-type: none"> <li>- buffer height 25mm</li> <li>- dimensions of chassis 100 (?) x400</li> </ul>	<ul style="list-style-type: none"> <li>➤ the wheels [HU]</li> <li>➤ [HU] + [IE]</li> <li>➤ the bogie [AT STP]</li> <li>➤ buffers [DE]</li> <li>➤ chassis [DE]</li> </ul>

<b>Description of work progress:  Topics / Tasks / Results / Decisions / Facts of importance</b>	<b>Responsible school(s) or  person(s) incl. deadlines</b>
<p><b>The motor</b></p> <ul style="list-style-type: none"> <li>- 3000 Rpm</li> <li>- the position of the motor- horizontally on the chassis</li> </ul> <p>The motor, the differential and wheels will be connected</p> <p><b>The differential(s)</b></p> <p>How to connect the differential, chains or gear? To be decided by Ireland.</p> <p><b>The Housing</b></p> <ul style="list-style-type: none"> <li>- 3mm thick (20 mm skirt - the vertical section)</li> <li>- total height = 120 mm (400x100?) (PT + LT)</li> </ul>	<ul style="list-style-type: none"> <li>➤ the motor [SI]</li>   <li>➤ [IE]</li>   <li>➤ the housing [PT]+ [LT]</li> </ul>