

Nordplus meeting on forestry curricula improvement
Memo from 30.th – 2. nd December
Estonia

Contents

Conclusions.....	1
Intro of the project.....	1
Metsähallitus	1
RMK	2
KomatsuForest	2
Ogre technical School.....	2
Jämsa college.....	3
Luu Metsanduskool	4
Annex 1 - Study comparison.....	5

Conclusions

1. Luua prepares curriculum for apprentice studies for all of us to comment shall it cover the need of employers.
 2. Ogre analyzes the possibility to implement 360 spider web for practice feedback, prepares the list of potential practice places.
 3. Jyvaskyla Educational Consortium, Jämsa College shall work on their web courses and e-learning tools.
 4. Ogre and Luua shall sign a memorandum of understanding for cooperation. Activity is additional to the planned activities within the project.
 5. Luua forestry machinery practice coordinator and project manager shall visit Jämsa in the winter of 2017 to set the possibilities of future cooperation. Activity is additional to the planned activities within the project.
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Intro of the project

- The requirements of the project and outcomes (Nordplus Machinery Intro slides ppt)
- Financial requirements (Finances ppt)
- Brief overview of the studies (annex 1)

Metsähallitus

- Biggest reason for participating in the Project it to ensure that in the future we will have well trained workers.
- Landowners need is that people at the forest will increase the land value no other way around. Quality of timber is more important than speed, as this is where money is lost.

- Good employees = good contractors. Company makes quality control and harvester calibration. Usually for newcomers also 1-week case study to show them their standards.
- If contractor then makes some serious mistakes during the work period, they lose points in next procurement. To come to the procurement, company must have previous experience at the work field and new machines.
- It takes 3 years (everyday work at companies) to be on the sufficient level for youngsters. Until then it seems that the work ordered (RMK, Metsähallitus) forgives more easily youngsters mistakes than the contractor they are working under.

exams

- Mh-urakoitsijasivut.net is the test and material address, that Metsähallitus contractors must learn due to PFC certificate that is held by Metsähallitus. Newcomers are not allowed to work at forests until they have passed the exam. Every 1-2 they must remake the exam.
- Thinks about the idea of individual examination of workers, such as in Estonia and Latvia. As their exam is Moodle based and online and they have no control over who is answering the test.
- Green licence is given out by Metsakeskus.

RMK

- Wish is to find more competent sub-contractors, who will follow the business given criteria's.
- Procurement price is fixed and the offer must come in the method of +/- of this price. During the procurement phase the previous work quality and statistical accuracy matters.
- New contractors get orientation day + training by company to know the rules of RMK.
- At Valtimo, the planning of work part is taught during the study period and this is something companies would like to see in our schools as well.

exams

- Workers of RMK are the members in evaluation committee.

KomatsuForest

- Main questions for the machine operator is how to maintain and operate certain machine correctly.
- New machine owner gets 1-2-day training of new machine. New operator is being trained within 1 week, but it is impossible to get perfect and with forest knowledge operator with 5 days.

Ogre technical School

- Need for the professional partners for practice.
- Ogre teaches forestry machine operations, theoretical part is more related to forestry, practical part is the actual forest work.
- Practice report is discussed at the school together with the practice company representative. Since 2015 practice happens at work. Similar to car driving licence – at car school only basic study happens, proficiency happens with time and at work place.

Exams

- Orge students graduate with final exams. Exam content is from state forestry. The cost of it is app 150€ worker/forwarder.
- In the end of studies students get vocational secondary diploma (students). People on the labour market will have to join the school and then they get diploma. As Orge is competence centre, skills must be presented at the level of 60% (in the 5-10 points grading system, 7). School diploma is the only qualification paper in Latvia.
- State forest accepts school diploma. State forest holds and special subject in the school curricula – talks about state forestry. Exam content is given by the state forest agency.

Jämsa college

- The key is to support each student on their learning path individually.
- Number of students that is ordered by state is not the topic. Popularity of forestry studies depend on the economic situation and the current popularity of curricula. Comes and goes. Interview and coordination week. If not suitable, advising more suitable studies.
- As each student gains the skills/competence in different time, unit of unit of hours is not used, instead, the credits show has the student reached to the necessary level. Estimated time of studies is 2,5years, in average it takes 2 years.
- Teachers responsibility as a mentor is to analyze student's actions, effectiveness and quality of work. Machines might be, but beforehand there must be teachers who understands how and what are they doing.
- Time of harvester-forwarder studies is not fixed to august-may. Instead, students are enrolled 4 times in a year. Summer is more-less adult's semester.
- Course program is opened for adults and youth, both – challenging teachers. **The aim is to find and test new learning methodologies – online and skype courses; camera technology for self-assessment etc.**
- Optimization of machines – machine computer program is studied before going to simulator – control measuring, map program and forwarder scale for example.

Study practice and work practice

- Subcontractors for private companies with 27 machines altogether in the school. Every 3rd year new machine, rotating the brand.
- Students must find their own work practice placements. During work practice, students have 2 supervisors – company one that is tutored beforehand and on long distance the teacher.
- It is easier for a youngster to find a practice placement than an adult. Students behavior, attitude is the reason they are spent back from the practice.
- Adults must have driving license to enroll the curricula. Youngsters will get that from the school budget. After B-cat, students can choose electives – truck license (c-kat 18+ in age), tractor license (T). Works as a motivational system – other subjects must be done before.
- Insurance for damages for 3rd party as well. If employer pays for the work for student – employers responsibility is the insurance. If employer is not paying for practice – school pays insurance.

Ending studies – no exams

Luuu Metsanduskool

- Need for flexible curricula that can be adopted to labour market students. Apprentice studies and the frames that create enormous amount of bureaucracy should be minimized.
- Implemented new system. Theoretical forestry studies subjects need to be done before they will go to imitator studies. Imitator studies must be done before they go on forest machines. No time calculation, but either succeeded/fail in subject => repeating the subject.
- No free driving licence during the studies, but there is point to think about – T licences for forwarder students.

Study practice and work practice

- Practice coordinator works with app 200 companies in his network. List goes to students and they must find their own practice companies.
- Need to accreditation the companies to be sure of their quality of teaching during the practice.
- Should we increase the school practice part has been a question for us?
- Problem with reaching to the students who are at practice place – no time to analyse them at work place.

Exams

- Luuu is centre for work force examination (through the contract with Estonian Forest and Timber Industries Association). Same exam for students and for work force.
- Exam consists of forestry knowledge test (10 question), practical work (felling/loading), description of maintenance, calibration principles (only for harvester).

Annex 1 - Study comparison

	Name of curricula	EQF	Level on entrance	Qualification exam level	Form	Theoretical/practice/work based	Time	Remarks
EST	Harvesteroperator	4	Previous work experience 2 years	Harvester 4	Apprenticeship	1/3 school, 2/3 at enterprise	1 year	
EST	Machineoperator	4	basic school diploma	Harvester 4	Stationary	1/4 (incl immitator))work practice + school practice	3 years	
EST	Harvesteroperator	4	high school diploma	Harvester 4	Stationary	1/4 work practice	2 years	
EST	Forvarderoperator	4	Previous work experience 2 years	Forvarder 4	Apprenticeship	1/3 school, 2/3 at enterprise	1 year	
EST	Forvarderoperator	4	basic school diploma	Forvarder 4	Stationary	1/4 work practice + school practice	3 years	
EST	Forvarderoperator	4	high school diploma	Forvarder 4	Stationary	1/4 work practice + school practice	2 years	
EST	Harvester/forvarder operator overview training	based on 4	N/A	Not obligatory	Individual	20%/80%	120 h	Tuition, usually with own machinery
LAT	Forestry machinery	4	basic school diploma	4	Stationary	40%/60%	4 years	
LAT	Forestry machinery	4	high school diploma	4	Stationary	40%/60%	1.5 years	
LAT	category F (Forest development and		N/A	Not obligatory	Individual	~ 80%/20%	170/208 h	170 h with previous knowledge;

	maintenance machines)							208 h without previous knowledge	
FIN	Forvarderoperator	4	basic diploma	school	na	individual - credits needed	30% at company	180 credits	1. year together, split-up
FIN	Harvester	4	basic diploma	school	na				1. year together, split-up
FIN	forest machine mechanics	4	basic diploma	school	na				

