





# **EU Hardwoods**

#### kick-off meeting / 13.03.2014

Peter Linsenmann

### Agenda



08:30 – 09:00 hrs	general issues, funding situation							
09:00 – 10:30 hrs	NP2 – detailed work plan							
10:30 – 12:00 hrs	WP1 – detailed work plan							
12:00 – 12:30 hrs	lunch							
12:30 – 13:15 hrs	WP3 – update							
13:15 – 14:00 hrs	WP4 – update							
14:00 – 14:45 hrs	WP5 – update							
14:45 – 15:30 hrs	WP6 – update							
15:30 – 16:00 hrs	any other business, next meeting							

## kick-off – general



14.11.2013 acceptance of EU Hardwoods for funding

strength	weaknesses							
important topic	German partners partly have a service function only							
objective & goals clearly defined	more partners from industry would be desirable							
reasonable budget	dissemination towards users (architects, designers, etc.) must be enforced							
very interesting project								
focus on representative species (in France): oak, beech (and ash)								
innovative, addresses challenge								
Recommendation $\rightarrow$ The deliverables should be described more precisely.								

### kick-off – general



- intention for this kick-off
  - $\circ\,$  coordination within the WPs by the leader
  - $\circ~$  each WP leader should prepare a presentation
- definition and discussion of the next steps

### funding situation



country	submission national proposal	approval	possible start
AT	07.02.2014	pending details to be clarified (VAT,) HFA submitted for all AT partners	01.03.2014
DE	in preparation	no official funding until July eligible costs probably from May	?
FR	31.01.2014	pending	01.03.2014
SI	end of 2013	granted	01.03.2014

# funding situation



Task	20	2014 2015								2016									
0																			
1.1																			
1.2																			
1.3																			
2.1																			
2.2																			
2.3																			
3.1																			
3.2																			
4.1																			
4.2																			
5.1																			
5.2																			
5.3																			
6																			

#### review of the minutes



#### meeting of 25.07.2013

more SMEs:	
AT: Fachverband der Holzindustrie	HFA
DE: Studiengemeinschaft Holzleimbau, 1 producer glulam with hydraulic press, 1 producer of window scantlings	MPA
SI: 2 producers available who could join the project on a small scale	CBD
HFA will included distinct information on the new SMEs in chapter 3.5	HFA
improving deliverables: please consult each WP.	

### WP0 – management



management split between HFA and Uni LJ

HFA

- o time schedule (e.g. milestone fulfilment)
- o reporting to WWN
- o meeting organisation and leadership

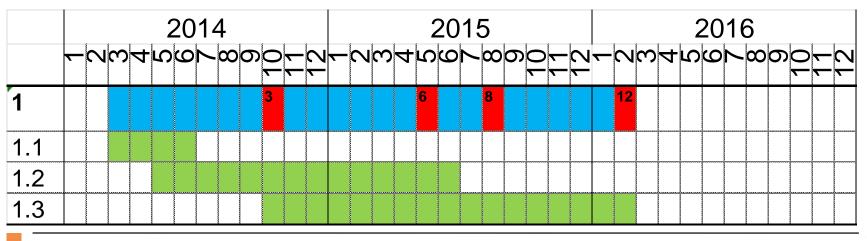
## Uni LJ

- content (e.g. deviations from proposal)
- o seminar organisation
- o publications
- web space





1	WP1 - hardwood resources in Europe	FVA (lead),
1.1	quantification of recent resources in Europe	FCBA, Uni
1.2	forecast to future resource availability	LJ, BFW
1.3	log quality and roundwood allocation potential	



### WP1 – review minutes



expected outcome: report on European hardwood resource with respect to the building sector (actual potential and forecasts).	FVA
todo: define species, redefine content, communicate with partners concerning input and available data	FVA

### WP2 – review minutes



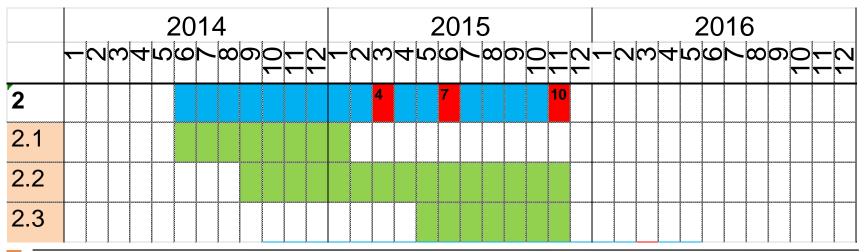
expected outcome: report on existing European testing data, allocations and basis							
for simulation of hardwood lamellas ("EN1912", beech, oak, ash, maybe chestnut	HFA						
(FR))							
todo: clarify the synergies between WP2 and WP3 for the full proposal.	HFA						

todo: clarify the synergies between WP2 and WP3 for the full proposal.





2	WP2 - Basic hardwood strength data and	HFA (lead),
	grading tools	FCBA, Uni
2.1	survey on existing lamella data with respect to	LJ, FVA, FVH
	species and dimensions	
2.2	allocation of hardwood lamellas to strength	
	classes, additional lamella testing if necessary	
2.3	attempt to consolidate visual grading rules and	
	address obstacles in machine strength grading	



### WP2 – working plan



WP	content	-	2	က	4	_	20 ©I		<u>ہ</u>	2	 1	2	က	4	_	20^ 201	· •	Σ	<u>א</u> ר אר	2	12
2	WP2 - Basic hardwood strength data and grading tools												4			7				10	Γ
2.1	survey on existing lamella data with respect to species and dimensions																				
aims	literature study on existing hardwood (mechanical) data; hardwoods in visual and machine strength grading																				
	literature survey pt. 1 (existing allocations, existing visual grading rules, existing machine grading input)																				
	data collection (required main content currently in prepation)																				
	data verification and discussion on aspired strength class combinations incl. grading rule																				

#### survey - data, grading



- WG2 meeting
  - o 26.03. 28.03.2014 Paris
  - initiative of Tobias Wiegand for hardwood standard
    → Ulrich Hübner will get recent information

#### survey - standards



- standards for visual hardwood grading listed in EN 1912
  - o DIN 4074-5
  - o INSTA 142
  - o UNE 56-546
  - o BS 5756+A1
  - o (NF B 52-001 T2)

### data collection



- focus on tension data
- set of parameters currently in preparation
- first step
  - $\circ$  species
  - o institute
  - o cross-section
  - o country & region
  - $\,\circ\,$  strength, MOE, density acc. to EN 384
- second step
  - visual grading data
  - o machine grading data

### working plan



WP	content	<u>,                                     </u>	~	1 N	4	20 0	•	•	თ	10	 12	~	2	n	4	 	15 ~	200		12
2.2	allocation of hardwood lamellas to strength classes, additional lamella testing if necessary																			
aims	allocation of as many hardwoods as possible in EN1912 for as many countries as possible; if necessary, additional testing																			
	decision on allocation based on report only or report to TG1 for EN1912																			
	allocation based on existing data: number of specimens graded acc. to which grading rule can be allocated to which D-class																			
	new data (if necessary): discussion on what to test (species, source, grading rule, dimension, number of specimens)																			
	material supply																		$\pm$	
	visual grading and tensile testing (who is testing what)																			
	allocation based on existing and new data																			

## working plan

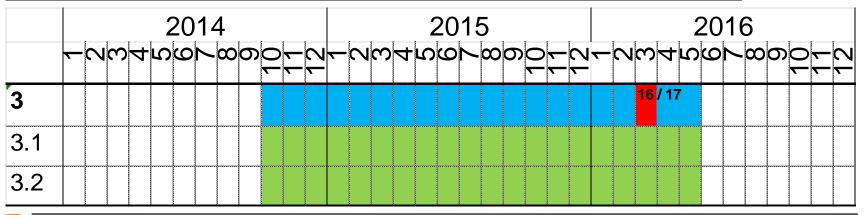


WP content	<u>-0</u> 04	2014 <u>5000000000000000000000000000000000000</u>	2015 
2.3 attempt to consolidate visual grading rules and address obstacles in machine strengt grading			
aims harmonised visual grading ru under which circumstances is strength grading possible (e. handling / manipulation,)			
- literature survey pt. 2 (atter consolidate visual grading ru obstacles in machine grading	es,		
- compendium hardwood us question)	ge (in		





3	WP3 - Adhesives for structural hardwood bonding	MPA (lead), FCBA, HFA
3.1	general: species dependent adhesives types, product dependent integrity tests designed for hardwoods, quality procedures adapted for hardwoods	
3.2	finger-joints: consolidate finger-joint data in solid wood and laminations, investigate influence of size and finger-joint type for the different species with accomplishing test if	



### **WP3 – review minutes**

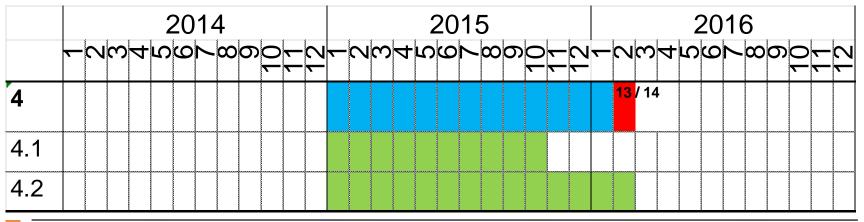


expected outcome: report on overview of adhesives for face bonding and finger-	MPA
joints, modification of adhesive tests and requirements for future adhesives for	
hardwood approvals (new glues, new test methods, …)	
todo: rewrite the proposal for this WP in this manner more precisely	MPA





4	WP4 - Glulam made of hardwoods or	FCBA (lead),
	hardwoods and softwoods	HFA, MPA,
4.1	simulation of glued laminated hardwood timber:	Uni LJ,
	- homogeneous	Simonin
	- inhomogeneous	
	- hybrid	
4.2	validation testing for assortment of build-ups	
	(produced under factory conditions)	



### WP4 – review minutes

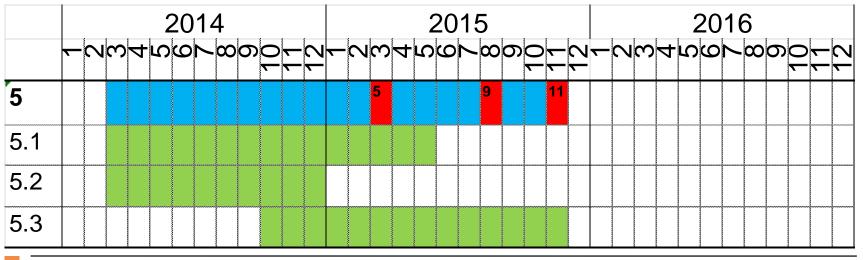


expected outcome: equation for finger-joint strength with respect to lamella strength,	FCBA
scientific basis of EN14080-2 hardwood glulam including adapted strength model	
todo: adapt the WP to modeling first, testing only in missing part or exclusively to test	FCBA
the outcome of the model.	





5	WP5 - Cross-laminated hybrid timber	MPA (lead), CBD
5.1	out-of plane loading (e.g. floors)	
5.2	in-plane loading (e.g. walls)	
5.3	derivation of basic strength profiles and design	
	rules	



### **WP5 – review minutes**



expected outcome: report on new product hybrid hardwood / softwood x-lam; improved shear, compression perp., bending capacity; potential for the building sector (medium and high rise buildings); use of low quality "energy" material, focus on beech	MPA/CBD
todo: very high variation within this WP (dimension, glue, pressing, planing,) needs to be limited in the proposal! clear definition to keep the parameters at bay ("reducing the matrix") material modeling for mass production for beech-softwood combinations exact design scenario available and possible usage presented in comparison to present products e.g. increasing shear capacity with very low beech qualities, deriving basic strength properties for hybrid CLT	MPA together with CBD

# WP6 – dissemination (Goran Turk)



- web space
- conference presentations
- joint articles in European Journal for Wood and Wood Products (> 3)
- two seminars for architects / civil engineers
- → keep track on dissemination and start in time

#### next steps



- define project start
- minutes (together with presentations) until 21.03.2014
- updated time table until 21.03.2014

### how we would like to proceed



- coordination within WPs important to keep up with work
- content preparation and definition focused on WP as well as on the whole project
- suggestion:

each WP leader prepares every two months a short report on the state of the art to send out to the consortium

### any other business



- date for the next meeting
- consortium agreement!





#### **Dipl.-Forstw. Peter Linsenmann**

p.linsenmann@holzforschung.at

Tel. +43/1/798 26 23-51

www.holzforschung.at