

Producing FSC Certified Board in Switzerland - Should FSC - Rules be Changed?

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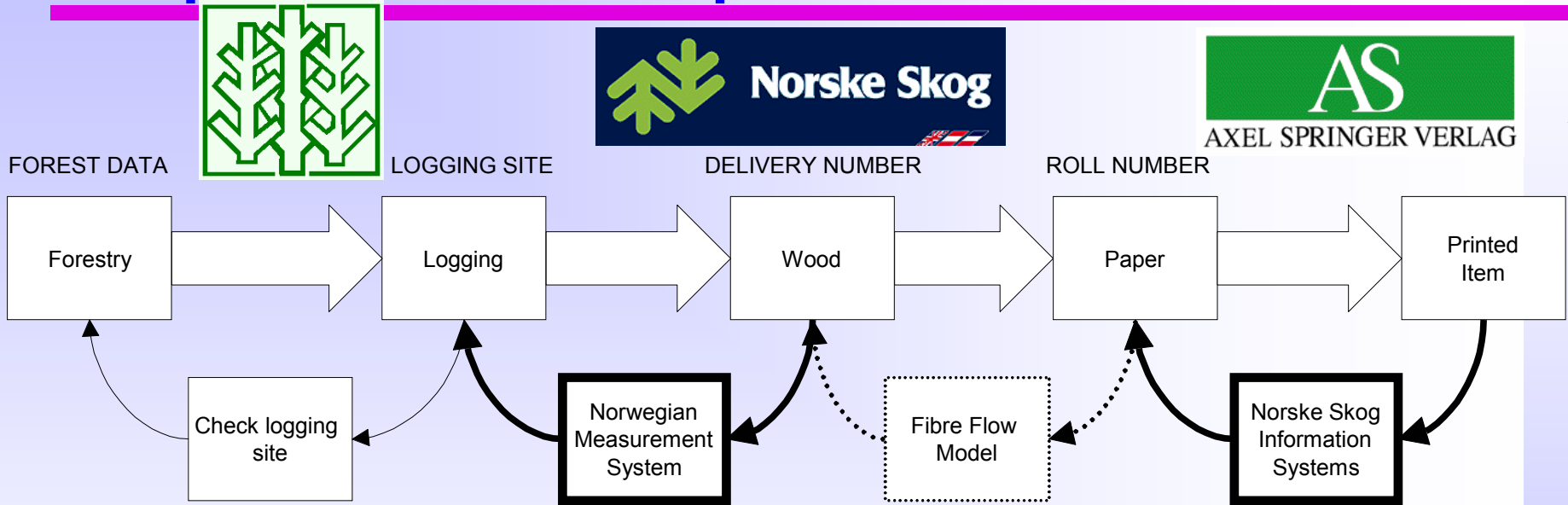
Paper and board are test cases for FSC chain of custody

- Bulk of European FSC forests
 - are in small number of countries
 - PEFC is competing successfully, major players will not choose for either system
- FSC production in bulk markets (paper, board, ..) is not developing satisfactorily
 - lacking consumer interest
 - complexity/cost of chain of custody
 - shortage/costs of FSC certified wood

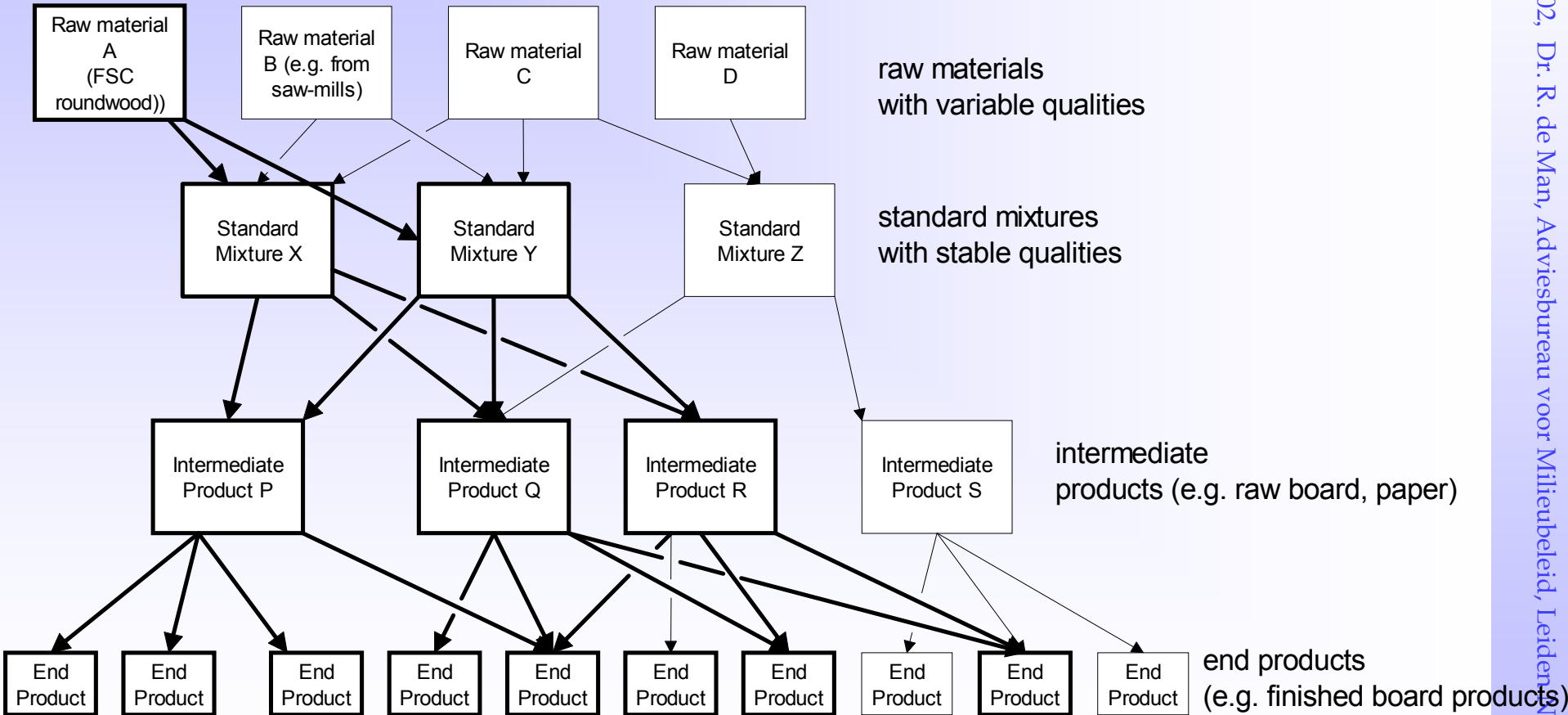
There is a mismatch between production systems and rules for chain or custody certification

- Advanced production: there is no simple material flow from one tree to one piece of fibre-board. The material from the tree is being dispersed over a great number of different products, possibly produced in a time-span of many hours or even days.
- Simple chain-of-custody ideas, based on separating certified wood from non-certified wood and on using this certified wood for selected production processes only are either technically impossible or create prohibitively high costs.
- See next two sheets.

A paper example



Complexity of optimised production systems



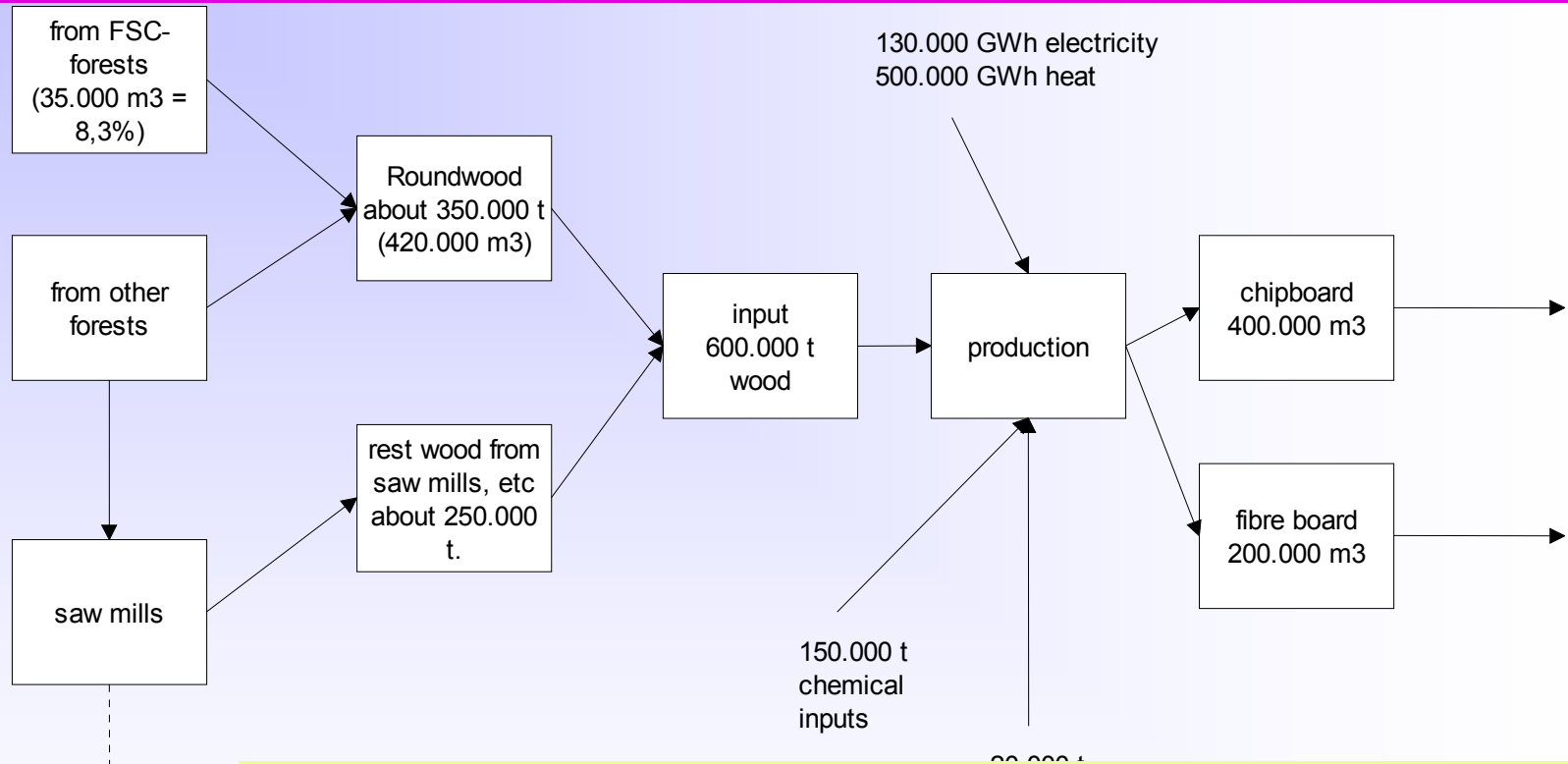
Three strategies for FSC-certified production

- If a high percentage of the raw material is FSC certified: guarantee input levels so that all products satisfy FSC rules;
- If there is not enough FSC wood for this strategy:
 - “spatial separation”: separate FSC production logistically from non-FSC → need for storage / process changes → costs
 - “temporal separation”: collect FSC wood until whole plant can run on FSC during 1 day or more → raw material storage → costs, use of FSC wood for non-FSC end product → costs.

Kronospan claims to have problems ...

- a relative shortage of FSC certified wood in Switzerland and resulting price premiums for FSC certified wood;
- the existing continuous process of board production and the high costs involved of separating FSC production from non-FSC production;
- FSC rules for minimum contents of certified fibre, especially rules for dealing with saw-mill by-products in the calculation.

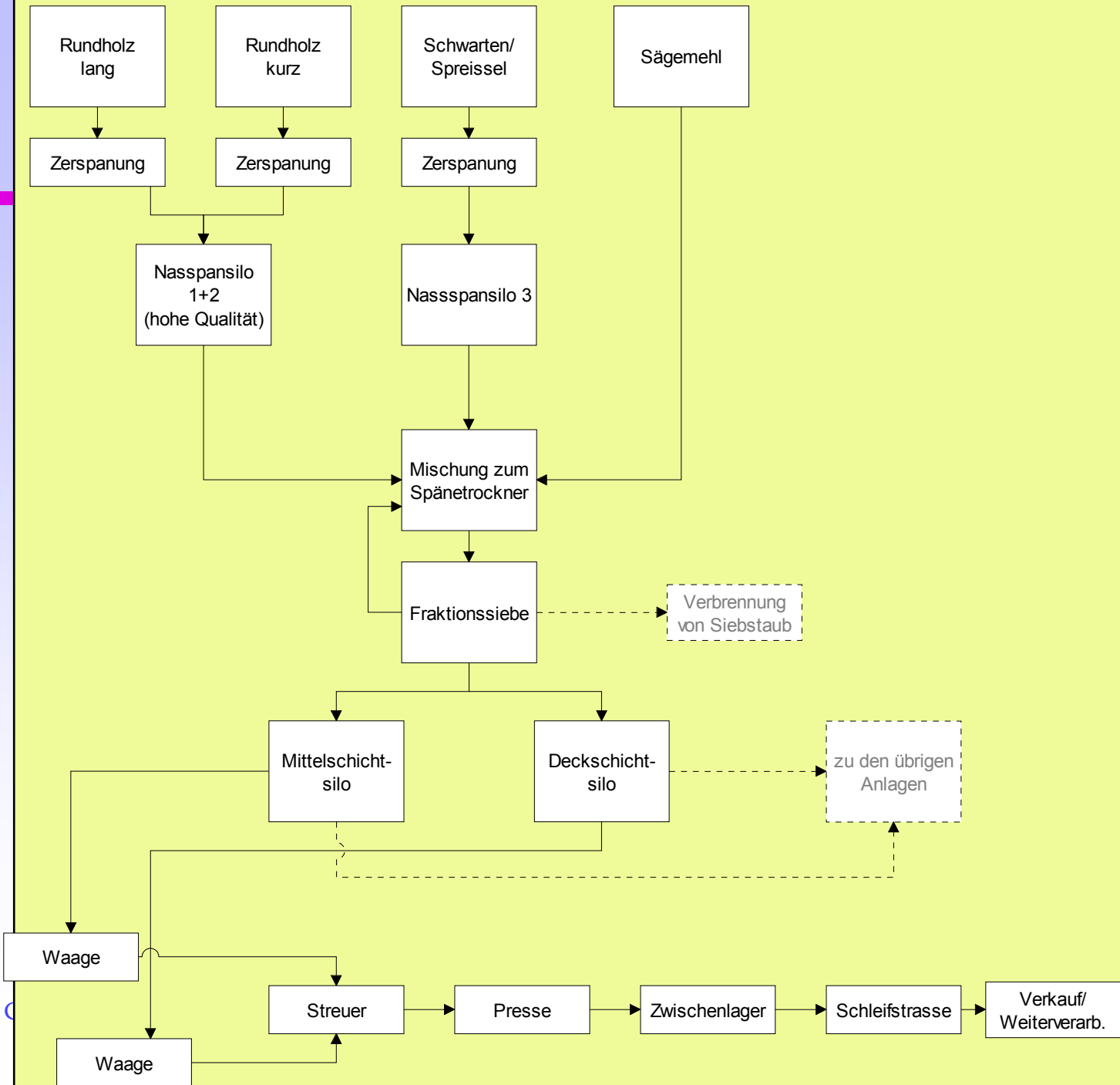
Kronospan: material flows



The Menznau factory consumes about 600.000 t of wood, of which somewhat more than 50% comes as roundwood from the forests and the rest as different by-products of saw-mills. In the figure, we have assumed 350.000 of roundwood, but it could easily be 300.000 t. With 8,3 % of FSC certified roundwood, FSC certified wood only represents between 4 and 5 percent of total wood input. In order to produce FSC-certified products, FSC wood has to be collected and used selectively.

Chip board production a

Kronospan Menznanu



Kronospan Menznau and FSC requirements

- FSC rules: 30% of fresh fiber should be FSC
 - saw-mill by-products are not being considered to be 'recycled'
 - as a result: 60% of roundwood input (=50% of total input) should be FSC
- FSC input (2000) = only 8,3%
- Two strategies available
 - spatial separation → prohibitively high costs according to Kronospan
 - temporal separation → see next sheet

Strategy 1 = spatial separation

- Cost categories:
 - Production processes have to be stopped and re-started at several points.
 - man-power and management time;
 - negative influence on other production lines;
 - The separation of all production steps, as required for FSC certification, causes some 20% of additional production costs
 - Overall production costs for FSC board will increase with 30-50%, including the price premium of 10% for FSC certified wood in Switzerland.
 - The market for FSC certified products will not accept any price increase of more than 5%.
- Kronospan will give some details during the meeting.

Strategy 2: temporal separation

(1)

■ The thought experiment:

- ▶ FSC wood is only 8,3%.
- ▶ We need 60% in production. We have to collect $60/8,3$ days FSC wood input input before for one day FSC production = 7,22 days).
- ▶ We assume that we need 1,5 days to build up the required levels of FSC certified wood
- ▶ We want to produce a number of days with the required FSC-level, say 4,5 days, i.e. 6 days certified wood input of a level of 60%, for which we need $6*7,22$ days FSC wood deliveries = 43 days.
- ▶ Kronospan could organise some 8 times a year a 4,5 day FSC-certified production.
- ▶ Total certified board output would be about $(8*4,5)/365 * 400.000 \text{ m}^3 = 11,8\% * 400;000 \text{ m}^3 = 47.500 \text{ m}^3$.

Strategy 2: temporal separation (2)

■ Advantages

- ▶ less complicated logistics
- ▶ less negative impacts on optimised process

■ Disadvantages

- ▶ storage required → costs
- ▶ potential quality risks of long storage
- ▶ expensive FSC wood goes into products for which there is no FSC demand → costs

Neither option is economically attractive

- The option on the basis of the continuous process is the least complicated but it uses too much FSC wood for products that do not need it.
 - ▶ Therefore it could lead to too high production costs in the end. More precise calculations are required to find out whether this is true.
 - ▶ Moreover, it is not completely certain whether a chain-of-custody certification based on recording basic flow parameters of the process and without separation of all production steps can easily be performed. This should be discussed with the certification body and, if needed, with FSC, see also text below.
- The other option leads to logistic problems, production time loss and management problems that cause cost increases of up to 50%.
 - ▶ In the words of a Kronospan presentation: “FSC products can only be positioned as niche products, quasi a hobby of Kronospan’s top management.”

Kronospan's proposals

1. Kronospan proposes to limit the accounting system to a system of registering FSC-inputs without the obligation to trace FSC wood between input and output. FSC products can be sold in a quantity based on total FSC inputs, not unlike the conventions used with 'green electricity'.
2. In addition, Kronospan proposes to change FSC rules for pre-consumer wood recycling materials, such as saw-mill by-products.

FSC rules for C.o.C.

- Present FSC rules distinguish between three categories of wood.
 - Category A: FSC certified wood;
 - Category B: so-called “neutral” wood, including recycled wood, but not including pre-consumer recycling wood from saw-mills;
 - Category C: non-certified wood.
- FSC wood fibre products, such as paper and board, should comply to two rules:
 - Rule 1: at least 17,5% of total fibre (A+B+C) should be FSC certified;
 - Rule 2: at least 30% of fresh fibre (A+C) should be FSC certified.

Different scenarios

minimum FSC wood with existing rules and change proposed by Kronospan	certified roundwood	non-certified roundwood	other wood	deciding rule	FSC wood needed (1000 m ³) [% of Swiss FSC output]
present rule	30% (= 60% of roundwood)	20%	50%	rule 2	252 [76%]
Kronospan's proposal 2	17,5% (= 35% of roundwood)	32,5%	50%	rule 1	147 [45%]
future FSC rule (50% of fresh fibre instead of 30%)	50% (=100% of roundwood)	0	50%	rule 2	more than available
future FSC rule + Kronospan's proposal 2	25% (= 50% of roundwood)	25	50	rule 2	210 [64%]

Kronospan's IN-OUT proposal

- would solve Kronospan's problems completely
- but:
 - ▶ Kronospan's problem is caused by the shortage of FSC wood in Switzerland, not by the chain-of-custody rules as such. The question is, whether making the rules less demanding is a way of increasing demand and thereby increasing supply of FSC certified products.
- This solution for a specific Swiss problem has repercussions for other countries as well.

Recommendations

- Certification of continuous processes should be based on recording basic process parameter over time, not on temporal or spatial separation of different process steps;
- The idea of 'batch' and 'batch length', as laid down in par. 1.4 of the present rules on percentage based claims, can better be left out.
- There should be a dialogue between board producers and FSC to discuss the alleged problem of 'temporal and physical separation of production steps' that is brought forward by Kronospan.
- The rules for classifying pre-consumer recycled wood from saw-mills should be re-considered but potential misuse should be discussed.