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Abbreviations

- APV Act de Punere în Valoare (Romanian document of origin, inventory/details of trees for harvesting plots)
- CoC Chain of Custody
- DDS Due Diligence System
- EUTR EU Timber Regulation¹
- FM Forest Management
- FMU Forest Management Unit
- FSC® Forest Stewardship Council²
- HS HS Timber Group³
- HS DDS Hub HS Due Diligence Hub, internal web platform covering information of the entire supply chain
- ISO International Organization for Standardization⁴
- PEFC[™] Programme for the Endorsement of Forest Certification⁵
- SCCC Supply Chain Control and Certification
- NFI National Forest Inventory⁶
- NSI National Statistics Institute
- FAO Food and Agriculture Organisation of the United Nations⁷
- AAP Asociația Administratorilor de Păduri (Association of Forest Administrators)
- SD Supplier Declaration
- SFI Sustainable Forestry Initiative⁸
- SUMAL Integrated Timber Tracking Information System (Sistem Informațional Integrat de Urmărire a Materialelor Lemnoase)
- MP Management Plan

¹ Timber regulation (europa.eu)

² About us | fsc.org

³ Contact (hs.at)

⁴ ISO - Standards

⁵What is PEFC? - PEFC - Programme for the Endorsement of Forest Certification

⁶ Inventarul Forestier National (roifn.ro)

⁷ Home | Food and Agriculture Organization of the United Nations (fao.org)

⁸ Who We Are - forests.org



1 Introduction

1.1 HS Timber Group's policies

HS Timber Group (HS) is a long-established wood processing company of Austrian origin, with strong roots in Central and Eastern Europe, especially in Romania. With around 3,100 employees in Austria, Germany, Romania and Finland, HS Timber Group produces high-quality wood products for industrial customers all over the world.

It is well known that there is a growing public attention towards all companies processing and delivering wood-based materials. On the one hand, wood is a sustainable material and efficient wood chains can play a key role in climate change mitigation; on the other hand, there is a growing concern that timber should not originate from forests subject to degradation and deforestation.

This report provides an overview of HS' Supply Chain, risk mitigation and input-related verification activities in the year 2022. More information about environmental issues can be found in the annual Sustainability Report.

HS has developed and implemented an advanced and robust Due Diligence System (DDS) for all its mills, to mitigate risks of purchasing and using wood material from illegal or controversial sources. The different measures within the organisation's DDS are set up to comply with the requirements for:

- National legal framework in all the countries where HS operates
- EUTR Regulation (EU) No 995/2010
- (US) Lacey Act
- (Japanese) Clean Wood Act
- PEFC STD 2002:2020 for all mills
- FSC policy of association requirements for the Comănești factory
- SFI certification for all mills
- HS' own Timber Sourcing Policy⁹

1.2 Production facility changes

In 2022, there were several changes in the production facilities:

- The Siret panel factory was closed
- The Rădăuți sawmill was stopped, only glued timber (POST & BEAM) production is maintained
- There are two operating sawmills in Romania (Sebeş, Reci)
- A Finnish sawmill Luvia was purchased by the Group in March 2022¹⁰
- Construction in Belarus was stopped, because of the sanctions imposed against Belarus
- The Argentina sawmill construction is ongoing and expected to be finished in November 2023
- There were no changes in Comănești and Kodersdorf

This report focuses on activities in the Rădăuți, Sebeş, Reci and Kodersdorf mills, the Comanesti blockboard factory and covers some basic data about the Luvia sawmill in Finland.

1.3 Supply Chain Department

HS Timber Group established the Supply Chain Department in 2016 - as fully independent from the Purchase Department and managed directly from its Vienna HQ. In 2022, the Department staff consisted of a Group Head, a Romanian Head, two officers per sawmill, one for the blockboard factory, one in Kodersdorf and one in Ukraine.

⁹ which includes Zero Timber from National Parks and Virgin Forests (Romania, Ukraine) and suspension policy

¹⁰ Luvian Saha



2 HS roundwood input/purchase range

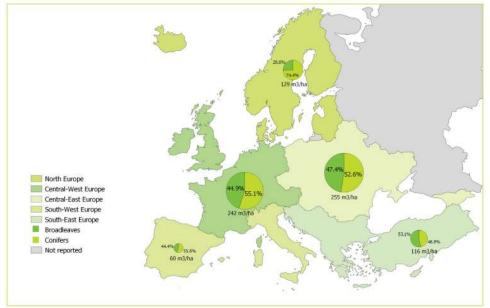
2.1 Update of HS' DDS in 2022

In 2022, HS analysed and made the following changes in its own Due Diligence System:

- Updated field auditing templates for logyard and plot audits
- Updated the Timber Sourcing Policy and Ukraine was introduced in the "Zero Timber from National Parks" policy
- The Supplier Code of Conduct was updated and transformed into the Code of Conduct for Business Partners
- Updated the Supplier Declaration:
 - Integrated the Code of Conduct for Business Partners
 - o Added a special clause related to conflict timber for Ukrainian suppliers
- Integrated internal systems with all plots from National Parks in Romania

2.2 Forest resources in Europe

Similarly to the previous years, in 2022 all purchased and processed roundwood originated from European Union countries. Therefore, this report pays special attention to forest resources in Europe. While there is a growing interest and concern about forest management and legality of harvest activities globally, it is an undoubted fact that forest resources in Europe are well managed. All available statistics indicate that both forest cover and, especially, the standing volume has increased continuously in the last 30 years.



Picture 1: Growing stock in forest by region, 2020¹¹

A key policy in all EU countries is the increase of the growing stock, as the annual removals have decreased. This policy has, by now, reached its natural limits. However, more and more wood accumulation in coniferous monocultures, together with changes in climate, lead to an increasing level of natural disturbances. This has been clearly visible in the bark beetle calamity in the Czech Republic and Germany in recent years.

-

¹¹ SoEF 2020.pdf (foresteurope.org)





Picture 2: Loss of forest cover between 2020-2021¹²

2.3 Countries of origin

All supplying countries are covered by risk assessments of the same structure:

- Geopolitical risks
- Integrity risks
- Human rights/employment risks
- Environmental risks

- Regulatory risks
- Operational risks
- Traceability risks

Risk assessments are based on available and reliable sources of information, including:

- CPI¹³ and Rule of Law index¹⁴
- Third party risk assessments¹⁵
- Country level forest management and traceability information
- Stakeholder input
- Forestry statistics and biodiversity information
- Extracts from media monitoring
- The EU infringement database
- Any other reliable info.

Since the risk level is significantly different in supplying countries, the DDS is developed and established in line with risk factors present in the country of origin, considering the country's CPI and available country level risk assessments. Core elements of the DDS are the following:

- Written purchase contracts applied in all cases.
- Annual Supplier Declaration is required to confirm country of origin and compliance with the Code of Conduct for Business Partners.
- Legal background check applied in high-risk countries, using national databases, or with D&B¹⁶ to check company status, ultimate beneficiary, convictions in relation to illegal harvesting and/or corruption.
- Verification of origin is performed at the delivery level, taking into account risk factors of the input country.
 Where regional risk mitigation is necessary, we apply targeted mitigation measures e.g., excluded areas in Poland¹⁷.
- HS relies on elaborated and compulsory Forest Management planning and public data in all Eastern European countries.

¹² Interactive World Forest Map & Tree Cover Change Data | GFW (globalforestwatch.org)

¹³ 2021 Corruption Perceptions Index - Explore the... - Transparency.org

¹⁴ WJP Rule of Law Index (worldjusticeproject.org)

¹⁵ <u>Document Centre | FSC Connect</u>

¹⁶ https://www.dnb.com/

¹⁷ Białowieża, Browsk and Hajnówka Forest Districts



- Where quality of forest operations does not meet low impact forestry requirements, HS does not accept wood from National Parks in the respective countries of origin, such as Romania and Ukraine.
- Certification is considered only as an additional source of information and risk mitigation measures, not as
 evidence of legality of the material.
- Where HS is an operator in the chain, the DDS meets additional EUTR requirements.

3 HS' DDS measures in high-risk countries

Romania is the only high-risk roundwood supplier country in HS' Supply Chain, where the DDS contains several country-specific features. These are explained in the next chapter in detail.

3.1 Special features of the Romanian forest sector

While generally forestry is considered low risk in Europe, the Romanian forest sector continues to receive criticism in the field of corruption, traceability and biodiversity.

There are some features which indicate this situation:

- CPI is below 50 even if increasing, it currently stands at 46¹⁸.
- Significant concerns regarding Virgin Forests and possible Virgin Forests.
- Underdeveloped forestry infrastructure, which means long distance skidding generating erosion and soil damage – this can deliver a strong visual impact that forest operations cause severe damage to forest ecology.
- Standing wood sale, which imposes additional requirements of verification of buyer/harvesting company and creates uncertainty about volume subject to harvest.
- High level of natural regeneration, which is very positive from the side of nature protection and biodiversity but requires higher return intensity.
- Contradicting statistics about the extracted volume (conflicting NFI and NSI¹⁹ statistics).
- Unclear and complex legislation and management rules, especially for Natura 2000 sites.
- Manual tree felling imposes significant difficulties to achieving piece-by-piece traceability.
- There is a high demand for firewood²⁰, which means that wood products can be easily sold in small quantities on the black market and without the security elements which are mandatory in business-to-business relations (invoice, VAT, contract, bank transfer, etc).

3.1.1 Improvements in data access in Romania

Access to reliable information is key in any risk management. This is especially important in high-risk countries. Access to data in Romania has been improved in several steps in the last decade.

- The first version of SUMAL was introduced as early as 2008. Since then, the Romanian wood traceability heavily became CoC oriented, e.g. key area of the verification is the transport of wood. Examples of other East-European countries prove that illegal harvesting cannot be stopped on the road, but much more so in the forest, where traces of any activity are visible even after several years. This is why it is essential that not only the deliveries, but also legally approved harvesting documentation is available publicly.
- Romsilva publishes all harvesting operations since 2017²¹. These include the APV, the coordinates of the harvesting plot, and the sketch/map of the plot.
- The recent development of SUMAL (called SUMAL 2.0) presents all key information of every harvesting operation in Romania, starting February 2021, including coordinates, volume, species, type of intervention, plot owner, FMU. At the end of December 2022, approximately 350,000 APVs were available in SUMAL, we therefore estimate that there are around 150,000 harvesting permits issued every year. The main features of the Timflow system have been integrated into SUMAL with this reform.
- State Management Plans (MPs) are also integrated into SUMAL step-by-step, down to sub-compartment level information the picture. Private MPs are also introduced gradually, with limited level of information.

-

¹⁸ 2022 Corruption Perceptions Index: Explore the... - Transparency.org

¹⁹ Seria silvicultura - Volumul de lemn exploatat, în anul 2021 | Institutul Național de Statistică (insse.ro)

²⁰ Microsoft Word - SV1 Baban and Popa .doc (unitbv.ro)

²¹ Wood Mass Catalog 2022 (rosilva.ro)



- The Ministry of Environment, Waters and Forests started publishing all state and private MPs²² in 2022. The database is still not complete, but contains several thousand management plans.
- Romanian Forest reports are available since 2005²³.
- The Virgin and Quasi-virgin Forests catalogue was created in 2016 down to sub-compartment level and was updated in 2022²⁴. Work is not yet completed, but matching the area included within the catalogue (70,000 hectares) with the age group over 160 years in NFI statistics (54,000 hectares +/-24%)²⁵ clearly indicates that a huge portion has been included in the catalogue as having full legal protection.
- Experts assume significant reduction of standing wood sale in the near future, as more than 50% of the state harvested volume shall be sold by Romsilva from roadside or own logyards, according to the Romanian Forestry Code²⁶, starting 1 January 2023.

3.1.2 NGOs' opinions on traceability systems in Romania

The harvested volume deviation shown in the NFI is widely discussed, and the biggest claim in recent years against the Romanian wood sector is that significant volumes are not registered in SUMAL. This opinion was interpreted with the support of statistical arguments where NFI and SUMAL data was matched.

The National Forest Inventory states the annual growth of Romanian forests stands at 58 million m³. The standing estimated volume in the 2012-2018 period shows a volume deviation of 133 million m³, which indicates an estimated 22 million m³/year. The simplified approach claims that the difference between 58 and 22 million is removed (36 million m³/year), which is quite far from NSI statistics. The National Statistics Institute data, which stands at 20 million m³27, is based on legal and documented wood deliveries from the forest.

It is not the task of HS' DDS to explain the missing volume (deadwood, brutto-netto, etc), still, NFI results offer data for coniferous - hardwood distribution, showing that 80% of the missing volume is in the hardwood segment of the Romanian forest output.

This is a key point in understanding that wood trade risk significantly differs by species and by transfer methods. The coniferous large-scale industry, where all wood transport requires large trucks, has significantly lower levels of illegality. Significant uncertainty is created from the fact that the primary selling method is standing wood, which is based on volume estimation (even if pieces are counted, height measurement is often based on sampling).

Agent Green questioned the reliability of the SUMAL system, in their study "Ten ways of cheating SUMAL" presented in October 2022²⁸. All these methods describe the situation when SUMAL is partly used (with less volume). Indeed, any measure is as good as it is implemented and enforceable. The national legislation took a big step forward when new regulation was introduced and, in case of volume deviations over 10 m³, not only the load, but also the truck is subject of confiscation.

WWF published²⁹ in October 2022 a second investigative report on wood traceability, to determine the evolution of the system and the "modus operandi" of the operators. The methodology consisted of different level analyses of the information from the field (video cameras) mounted at the exit of forest roads, compared with SUMAL data. Three locations were used in 2022 and in 2021 in the same period – WWF wanted to follow the impact of changes in the legislation (SUMAL 1.0 vs SUMAL 2.0). The results showed:

- 40% of all transports did not have any delivery notes or were conducting multiple transports
 - o 25% trucks
 - 75% small vans/carriages/other means mostly firewood
- 22% (92 transports) did not have delivery documents
 A big increase of trucks 24 in 2021, compared to 2 in 2020 presumably happened because of a SUMAL system bug/glitch.

²² Files - Amenajamente silvice (mmap.ro)

²³ STAREA PĂDURILOR | Ministerul Mediului (mmediu.ro)

²⁴ Catalogul pădurilor virgine și cvasivirgine din România | Ministerul Mediului (mmediu.ro)

²⁵ Rezultate IFN – Ciclul II | National Forest Inventory (roifn.ro)

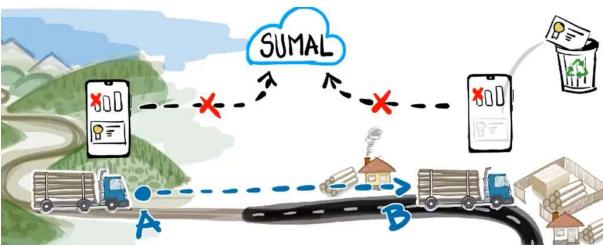
²⁶ FORESTRY CODE (A) 19/03/2008 - Legislative Portal (just.ro)

²⁷ <u>Sinteza-raport_Impactul-socio-economic-si-climatic_Traducere-EN.pdf (pro-lemn.ro)</u>

²⁸ raport Agent Green

²⁹ WWF-Raport-monitorizare-video-in-padure.pdf





Picture 3: Offline codes are deleted if app is uninstalled

The results of both investigations led to a few changes in HS' DDS, such as conducting more logyard audits focused on the SUMAL balance and visual estimation of the volume. We continued and increased the number of trucks which are checked weekly – "Traceability check", where the HS staff is checking truck movement form the forests to the suppliers' logyards.

US-based NGO Environment Investigation Agency (EIA) reported the SUMAL traceability system as reliable in their blogpost³⁰. This report states "that there are no significant technical barriers to the provision of GPS coordinates of forest areas, and that it is perfectly reasonable for the new European deforestation-free products regulation to require provision of GPS coordinates by importers, traders and their suppliers. Traceability to the harvest site is critical to the success of the EU's proposed deforestation regulation. Evidence from Romania's forestry sector shows existing geolocation technologies are up to the task."

3.2 Supplier onboarding process

HS Timber Group does not perform wood harvesting activities. Therefore, all input is purchased from third parties, e.g. directly from Forest Management Units (roadside contracts) or from harvesting companies that perform complex activities of wood trade:

- buy "standing plot" at auctions.
- perform the harvest operations and sort wood by species and quality requirements.
- sell roundwood to different buyers.
- process part of the best quality (mostly big diameters) roundwood to sawn wood themselves.
- and therefore, are also involved in (local) sawn wood and firewood business.

HS Timber Group applies a well-regulated process to select its own suppliers:

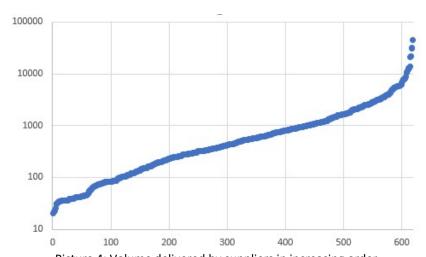
- There is a domestic legal process to grant the status of harvesting company in Romania³¹, based on a technical and legal verification (staff, equipment, etc). A license is granted by a special commission, which determines the maximum volume a company can purchase and harvest in one year and allows the respective company to take part in wood purchasing auctions.
- HS' staff performs legal background checks using public information such as court registers to find if the company/owner has been involved in any criminal activities in the field of illegal logging and corruption.
- Contracts are created and all steps of the approval process are confirmed by time stamps.
- Suppliers receive a Timflow-dedicated GPS tracker for each truck, with a SIM card subscription covered by HS and a training to be Timflow compliant.
- The Code of Conduct for Business Partners³² shall be accepted by all HS partners.
- Initial CoC audit in case of logyard suppliers.

³⁰ Back to the source: EIA study of Romanian data shows traceability to the harvest site is possible using GPS - EIA US

³¹ Status of attestation / reattachment certificates – April 20, 2022 - Association of Foresters in Romania - ASFOR

³² Code of Conduct for Business Partners (hs.at)





Picture 4: Volume delivered by suppliers in increasing order. Vertical: aggregate volume in m³; horizontal: number of suppliers

HS' Supply Chain is stable and simple. In 2022, purchase contracts were made with 965 direct partners:

- 698 roundwood suppliers for Romanian sawmills (including collecting points).
- 184 roundwood suppliers for Kodersdorf.
- 83 sawn timber and other material (veneer, PAL, lumber core, etc.) suppliers for Rădăuți, Comănești and Sebeș. Of the total, 130 suppliers were new (no business relationship in 2021 and 2020). In terms of volume, 70% of suppliers

Of the total, 130 suppliers were new (no business relationship in 2021 and 2020). In terms of volume, 70% of suppliers delivered less than 100 m³ (two trucks) per month.

The sawmill in Finland purchased from 1,309 direct suppliers, out of which 6 are forest associations.

Daily media monitoring and active collaboration with stakeholders also supports data collection to obtain the most recent information about suppliers and other companies.



3.3 Traceability verifications

3.3.1 Timflow

Traceability verifications proved to be effective and critical in a high-risk country, where the buyer could prove that all purchased wood came from legally approved harvesting operations. Unfortunately, in the current Romanian conditions, over 90% of wood removals are performed with manual chainsaw felling – skidding in full length – first sorting at the primary platform, with additional sorting in the logyards – which makes any type of piece-by-piece identification (tagging, painting, etc) unreliable and costly (would give one false feeling of security)³³.

HS Timber Group has a leading role in providing public access over transaction level information, by introducing the Timflow system as early as April 2017. The system is available for any third party online at www.timflow.com – after a simple registration process - and offers transaction level information (each truck) including:

- Origin location and GPS coordinates
- APV code if the delivery is initiated from the primary platform
- Photo documentation of the load
- Route provided by the GPS unit fixed into all trucks which deliver roundwood to HS.

All deviations and perceived errors trigger an internal investigation.

In 2022, 25,109 deliveries were covered by Timflow³⁴. There is a gate control of all input, including legal requirements, (SUMAL online code AVIZ), Timflow (route, photo, origin) and volume control. A total 6.52% (1,636) of the deliveries were subject to additional investigation, where not all the features above were complete.

The most typical reasons of additional investigation are

- Missing or incomplete route (484 + 110 cases)
- Timflow was not initiated (71 cases)
- Loading point deviation (out of circle: 294 cases)
- APV was not registered in Timflow before the arrival of the load (367 cases)
- Other (missing audit of the supplier, contact was not completed, etc. (310 cases)

In these cases, the load is stored separately (if the online code is valid, the takeover process cannot be refused) and the SCCC Department performs additional verification to identify the missing elements of the DDS.

We refused 4 transports in 2022:

- One from a National Park, identified by cross-checking the APV from the delivery note with our internal database
- One from a suspended company which tried to deliver through another supplier
- One identified with volume differences between forest and logyard even if the load was the same (picture comparison)
- Part of the load was containing a wrong assortment.

Since February 2021, the Romanian state wood monitoring system <u>Inspectorul Padurii³⁵</u> offers similar functions to Timflow, with a public access of wood deliveries for the last four days. Currently, HS' Timflow operates parallel with SUMAL 2.0, which provides double security in case of technical errors. The advantage of Timflow is that the GPS tracker is fixed into the truck and higher resolution watermarked photos are stored.

In 2022, the Timflow system covered 25,109 deliveries. This means approximately 20,000 deliveries from suppliers (HS' collecting points Rădăuți, Susenii Bârgăului, Săcel, Gura Humorului cover both their input and output to HS mills by Timflow, therefore these a counted twice in the Timflow statistics.)

3.3.2 CoC audits

In 2022, HS staff performed and documented 272 CoC audits, in line with the predefined audit intensity rules. Additionally to health and safety checks and documents review, a key function of these is to estimate the volume and compare it with SUMAL volumes: any extra volume indicates not documented and, therefore, illegal input.

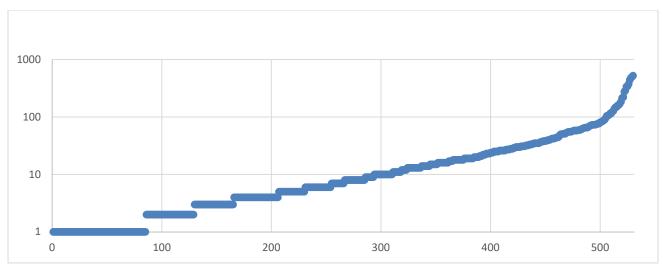
In 2022, two logyards were suspended from further deliveries after CoC audits, as the volumes in SUMAL could not be confirmed in the logyard. 60% of logyards delivered less than a single truck (~40 m³) monthly.

³³ Contrary to western European countries, where the harvesting operation is made by harvesters - therefore sorting and potential tagging or marking is made in the forest and pieces remain identical, irrespectively of how many stages of loading are involved in the chain to the final buyer.

³⁴ Input and output of PDL (HS logyards) are double accounted, as Timflow is applied for both input and output (to mill).

³⁵ Inspectorul Padurii





Picture 5: Number of trucks from suppliers' logyards in 2022 in increasing order (logarithmic scale).

Vertical: number of deliveries per year. Horizontal: number of logyards

3.3.3 Traceability verifications in the SUMAL system

Traceability verifications are usually based on the registry plates of the supplier's trucks used between forest and logyard. These weekly checks helped HS to get first-hand information about new APVs and photo documentation from its direct suppliers and allowed it to verify and estimate volume deviations on the trucks.

Traceability verifications are also effective to prevent input from National Parks – which are fully legal but against HS' Timber Sourcing Policy. Random verification of other nearby active plots (and routes) can reveal whether some suppliers purchase wood from third parties with NP origin without informing HS.

As it was previously emphasised, the request to have all documents of origin is a key feature of HS' DDS. In case of a missing APV, wood cannot enter production, and it is separated and stored as "under investigation" until the information can be positively verified.



3.4 Compliance with forestry measures

3.4.1 FMU verification

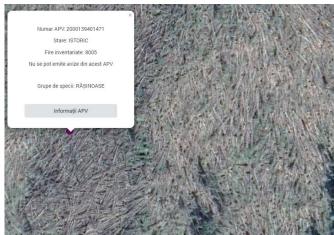
HS' DDS requires suppliers to always present their harvesting documentation, therefore HS' DDS is based on reliable information related to wood origin, as APVs determine the FMU in all cases. The Forest Management Unit verification includes approval status of management plans and whether or not there is any public information regarding previous illegal activities. For the FMU level verification, HS' DDS considers third party certification as a reliable risk mitigation tool and assesses the content of publicly available forest management reports. This is the reason HS is committed to promoting and using forest certification, partly as a risk mitigation tool, and partly as an important measure to increase society awareness toward sustainable forest management³⁶.

The Romanian forest administration system is very elaborated and pays special attention to Forestry Code limits of clearcuts, which is max. 5 hectares in case of plantations, and 3 hectares in natural forests³⁷.

Photos presented in social media³⁸ as clearcuts and "deforestation" are in all cases windfalls or results of other natural disturbances.

One good example is the New York Times story³⁹ published in September 2022. While HS is not involved, as it uses only sawn wood residues for pellet production, it is worth noting that the "ancient forests sacrificed for pellet production" are actually windfalls, as it is clearly visible both on satellite photos and well documented in the Romanian wood traceability system.





Picture 6: Images from the New York Times article and satellite photos of the windfall⁴⁰

The FMU verification also verifies the status of the road network in the area. Romsilva presents all state managed and most other forestry roads on their homepage⁴¹. Most experts agree and the National Forest Strategy⁴² states that significant development of the forestry road network is crucial to achieve better transparency, improve access, and reduce skidding damages, however, significant progress might be achieved in a timeframe of a decade.

3.4.2 Harvest plot verification

The harvest plot level verification is performed as a document review in all cases and as a field inspection for sample selections. Starting with 2020, APVs are not only stored as documents, but content is digitalised to allow more effective data handling of the descriptive data as volume (total and coniferous), harvesting start and end date, FMU, ownership (private or state), harvest area, etc. Digitalised information creates the possibility to have better statistics of HS' sourcing areas as harvest intensity, age of stands and intervention types. Based on this information, better risk assessments are made and the SCCC Department can perform a better targeted plot sample selection.

³⁶ CoC: CoC certification has no risk mitigation function in terms of traceability, e.g. certified companies are also subject to second, or third-party verification as non-certified ones.

³⁷ Forestry code

³⁸ WWF-EU-Forest-Crime-Recommendations.pdf

³⁹ Europe Is Sacrificing Its Ancient Forests for Energy - The New York Times (nytimes.com)

⁴⁰ Sandominic Romania, coordinates: 46.688714, 25.793919

⁴¹ https://gis.rosilva.ro/forest-roads/Map2/#12/46.5538/26.3160

⁴² STRATEGY 05/10/2022 - Legislative Portal (just.ro)



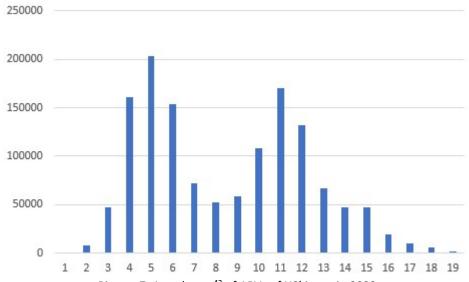
Efficient wood processing requires active information channels between HS and its suppliers. A new mobile (Android) application from 2021 makes it easier for suppliers to send the required documentation directly into our internal platform – the DDS HUB – and, therefore, double manipulation – due to missing documentation - can be reduced.

In technical terms, a plot visit means an inspection of an ongoing harvesting operation, which covers the checking of the harvesting documentation, marking of the trees, applied health and safety measures and the verification of low impact forestry features. As any other field inspections, plot audits are made with iAuditor and data (images, findings, location, date) is stored digitally.

In 2022, the HS staff performed 124 plot audits in Romania and issued 170 corrective action requests, mostly in the field of health and safety, missing plot indicator and damages related to harvesting activities.

3.4.3 Harvest impact monitoring

In 2021, the total harvested volume from public and private forests was 19,4 mil m3. The same or slightly bigger volume is expected to be reported for 2022. This resulted in a total number of roughly 180.000 APVs in the whole of Romania. Our SCCC team registered 3,816 APVs in 2022 as potential sources of origin for our sawlogs. The total volume (meaning all assortments, from firewood to sawlogs) from these registered APVs was 2.19 million m3 whereas the coniferous saw logs (the assortment HS can potentially use) was just 1.4 million m3. From this we finally received 0.85 million m3. This is a good indicator that HS purchases mostly the smaller diameter assortments, not the entire volume.



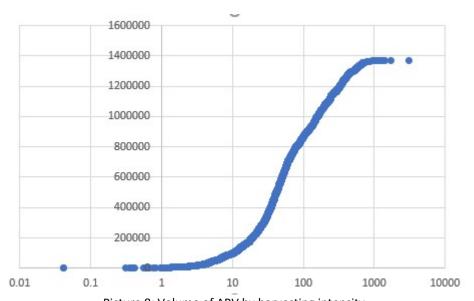
Picture 7: Age classes⁴³ of APVs of HS' input in 2022. Vertical scale: APV volume in m³, horizontal scale: age groups

2.7 % of purchased volume originated from forests older than 160 years. 75.8% is from thinnings (from forests younger than 120 years). The basis of the harvesting intensity is the total volume (both coniferous and broadleaved trees) divided by area of the harvesting operation. This is a good indicator that the input is in line with HS' Timber Sourcing Policy of focusing on the small diameter class from coniferous logs. Peaks are first and second thinnings and are clearly visible in the age distribution of the harvesting documents presented by suppliers.

⁴³ In many cases, one APV covers more sub-compartments from different age classes (average is 3 sub-compartments per APV).

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Picture 8: Volume of APV by harvesting intensity Vertical scale: volume in m³, horizontal scale: number of APVs in logarithmic scale

3.5 Compliance with biodiversity requirements

3.5.1 Virgin Forests' protection

One heavily discussed criticism against Romanian forest management is that no adequate protection is provided for the Virgin Forests, especially if these are located outside the traditional network of National Parks.

Romania introduced the Virgin Forest catalogue in December 2016 and, in the last five years, the area of forests which received the status of Virgin and Quasi-virgin increased to over 70,000 hectares⁴⁴.

Since the National Forest Inventory estimates the forest area older than 160 years to stand at 54,952 ha⁴⁵, (plus-minus 24% estimation error) by now protection of Virgin Forests seems close to reaching the existing surface. Additional increase is primary depending on the definition of Virgin Forests, especially with regards to the minimum area and what level of previous human intervention is accepted.

Date of protection	Virgin (ha)	Quasi virgin (ha)	Total area (ha)
2016 December 07	2,569.03	10,565.09	13,134.12
2018 October 01	5,898.92	15,192.60	21,091.52
2019 May 15	6,947.22	22,116.36	29,063.58
2020 January 16	6,665.46	23,396.60	30,062.06
2020 March 23	6,665.46	26,368.15	33,033.61
2020 November 18	7,401.98	36,421.38	43,823.36
2021 April 23	7,705.65	49,821.35	57,527.00
2021 September 17	7,993.84	54,661.40	62,655.24
2021 December 23	8,579.80	61,489.23	70,069.03
2022 September 09	8,579.80	62,497.64	71,077.44

Table 2: Virgin Forests Catalogue in Romania – annual surface update

HS' DDS biodiversity protection is based on the following additional measures:

- The HS DDS field audit questionnaire was updated in 2022 to include photos of rare species.
- All plots over 160 years which are located in Natura 2000 sites are visited by HS staff to check compliance and mitigate the risk of possible Virgin Forest and monitor compliance with biodiversity protection requirements.
- All plot visits include assessment of compliance with low impact forestry requirements.
- HS promotes mobile bridges, which help prevent that machinery enters riverbeds.

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⁴⁴ Catalogul pădurilor virgine și cvasivirgine din România | Ministerul Mediului (mmediu.ro)

⁴⁵ Rezultate IFN – Ciclul II | National Forest Inventory (roifn.ro)



Since 2020, HS offers different levels of support and assistance for medium-sized suppliers to purchase second-hand forwarders and therefore increase their efficiency and reduce environmental damages, e.g., in 2022, with HS support, a supplier achieved better efficiency and environment protection with a forwarder and a cableway system.

3.5.2 Compliance with the National Park Policy

Starting 2017, HS maintains a Zero Timber from National Park Policy in Romania, that was extended last year to Ukraine⁴⁶ as well. It had previously been a challenge to enforce the policy, as this wood was always considered legal in Romania. Since February 2021, the new SUMAL created much more transparency and offered HS a more efficient and more proactive implementation of its policy, as SUMAL presents all APVs (volume, species, location, owner), therefore HS can verify all activities in Romanian National Parks.

In 2022, HS collected 824 APVs which were issued in NP buffer zones. These APVs represent ~179,000 m³ of harvested volume. There are 442 APVs with no coniferous volume, therefore no further verification was necessary here.

From the 381 APVs with coniferous volume:

- 223 plots belong to companies that were never HS suppliers
- 87 plots belong to suppliers that are currently not active
- 71 plots belong to 31 different suppliers which, indeed, had NP input in 2022 to a total of 19,688 m³ and which required additional preventive measures. Half of this volume is contained by the three biggest plots. Applied measures were separation in the logyard, temporary direct deliveries only and time monitoring of opening-closing of NP plots.

This tool proved its efficiency when one direct delivery from an NP plot could be immediately identified 47 and - because legally HS cannot refuse it – the volume was sold to a third party, as the supplier had no logyard – therefore could not take it back.

3.5.3 Natura 2000 infringement procedures

Difficulties in the Romanian legislative process led to several infringement procedures in the previous years⁴⁸.

Number	Status	Description
INFR(2019)2138	25/07/2019 Formal notice Art. 258 TFEU	Natura - Incomplete Natura 2000 Network in breach of the Habitats Directive in Romania
INFR(2020)2238	2/07/2020 Formal notice Art. 258 TFEU	NATURE – Designation of Special Areas of Conservation in Romania
INFR(2021)2022	9/06/2021 Formal notice Art. 258 TFEU 9/02/2022 Reasoned opinion Art. 258 TFEU	NATURE - Failure by Romania to fulfil obligations under the Invasive Alien Species Regulation
INFR(2020)2033	12/02/2020 Formal notice Art. 258 TFEU 2/07/2020 Reasoned opinion Art. 258 TFEU	NATURE - Logging in Romania
INFR(2020)2297	30/10/2020 Formal notice Art. 258 TFEU	NATURE - TRANSPOSITION OF DIRECTIVE 92/43/EEC ON THE CONSERVATION OF NATURAL HABITATS AND WILD FLORA AND FAUNA IN ROMANIA

Table 3: List of open infringement procedures against Romania

There was no development supporting the closing of the infringement procedures⁴⁹ against Romania in 2022. The Ministry Orders 1946 and 1947 were suspended after being challenged in court by AAP. A new approach to solve this was

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⁴⁶ In Ukraine, all NPs are considered separate FMUs, therefore mixing of NP and non NP wood is low.

⁴⁷ Timflow Woodtracking

⁴⁸ Currently, there are 80 open infringement procedures at the field in Natura, affecting all EU countries but Hungary, Luxemburg and Denmark.

⁴⁹ https://ec.europa.eu/atwork/applying-eu-law/infringements-proceedings/infringement decisions/index.cfm?lang code=EN&typeOfSearch=true&active only=1&noncom=0&r doss ier=&decision date from=&decision date to=&DG=ENV&title=nature&submit=Search



initiated at the end of 2022, where the impact evaluation clarifications would be approved by Government Decision, which would change the Forestry Code, Law 46/2008.

The Natura 2000 status is investigated in three different infringement procedures, and EUTR compliance generated a case in 2020. These cases generated significant pressure on the Romanian state and the first positive impacts are clearly visible (SUMAL, modification of forest legislation) but, for the time being, it is rather unclear if the EU Court process would be initiated⁵⁰.

It is important to emphasise that the infringement procedure is ongoing between the member state and the EU Commission and does not affect the legality of the wood which has been harvested in line with domestic regulations and allocated in the SUMAL system.

3.6 Suspensions and case management

The strongest and most critical measure in HS' DDS is the suspension of a supplier due to lack of compliance with legal requirements or HS' Timber Sourcing Policy.

Compliance is monitored at three different levels:

- in Timflow, lack of compliance may lead to suspension of the truck for a period of 1-2-3 months.
- during field audits, corrective action requests are graded according to regular certification rules (observation, minor, major) and lack of corrective action measures lead to suspension.
- media monitoring and internal third-party input triggered investigations which also resulted in suspensions for a maximum of 3 years.

In 2022, HS' DDS suspended suppliers in 8 cases, of which one supplier was released from suspension during the year after further investigation and an on-site audit provided sufficient information to lift the suspension.

Additionally to the suspensions above, HS monitors all cases reported in the media monitoring or raised by stakeholders. In these cases – if a company is not an HS supplier, a precautionary suspension is raised to prevent that HS would work with the given company later – without the proper investigation of the case. In 2022, precautionary suspension was decided in 11 cases, mostly for accusation of underestimated volumes and confiscation of the volumes and/or trucks. HS' DDS collects stakeholder inputs and significant deviations as "cases" in its time stamped internal document handling system. In 2022, 31 cases were registered. Of these, 8 were considered "unsubstantiated", e.g. not justified, 2 of them are pending. In the remaining 21 cases HS' DDS applied different measures, from oral reprimand to suspension of the

contract.

⁵⁰ Currently, there are 66 open infringement cases against 23 countries in the EU, the oldest open case is over 20 years. INFR(1998)2290 against Ireland – as EU legislation allows for the Commission to judge at what time it will bring an action for failure to fulfil obligations.



3.7 HS' certification policy

HS Timber Groups' target is to source 100% of its timber from forests certified by PEFC and/or FSC® forest certification schemes by 2025.

The table below represents the material received with a claim, e.g. both the forest and the harvesting company are certified. Wood originating from certified input is significantly higher in case of Romania and Slovakia, and there is additional room for increasing the area of certified forests in the private sector.

Sourcing country	% PEFC ⁵¹	% FSC ⁵²	% Non-certified
Germany	51%	0%	49%
Austria	72%	0%	28%
Poland	79%	3%	18%
Romania	0%	8%	91%
Slovakia	6%	0%	94%
Czech Republic	71%	0%	29%
Finland	34%	0%	66%
Sweden	74%	0%	26%
Latvia	0%	0%	100%
Total	46%	3%	52%

Table 4: Certified input share/country of origin – Group level

3.7.1 PEFC CoC

HS Timber Group maintains five single site certificates in Romania and one in Germany. PEFC annual surveillance audits were organised in 2022 in March (Romania) and in July (Kodersdorf.)

During these audits, two minor non-compliances were issued, related to technical implementation of PEFC claims and trademark requirements.

KOD	PEFC ST 2001:2020 4.1.2	On sales documentation - invoices and delivery notes, the PEFC logo displays with correct number: PEFC/04-31-3065, however it is not compliant with the latest versions of the PEFC Trademark requirements, e.g. a TM sign is used.
SEBES	5.2.1 g	PEFC claim PEFC Controlled sources (Surse controlate PEFC) on the Specification No. 66 and 67 doesn't match the claim on the invoice (100% PEFC certified). The rest of delivery notes Specification 68, 69 and 70 includes the correct PEFC claim.

Contrary to general industry practices, HS Timber Group sells all products with the minimum claim of PEFC Controlled Sources. HS' DDS applies the same control level to certified and non-certified material, and everything is sold with a minimum claim of PEFC Controlled Sources.

3.7.2 Sustainable Forestry Initiative® Label Recognizing Global Standards

HS Timber Group is the first solid wood lumber company approved to use the Sustainable Forestry Initiative (SFI®) Label Recognizing Global Standards, which recognizes PEFC Chain of Custody (CoC) certified wood products outside of North America. A precondition to use the SFI Label Recognizing Global Standards is to have a PEFC Chain of Custody Certification. HS Timber Group certified to the PEFC CoC standard in 2014.

52 Facts & Figures | FSC Connect

⁵¹ PEFC Global Statistics



SFI advances sustainability through forest-focused collaborations. By using the SFI Label, HS Timber Group is helping to educate the market about sustainably sourced forest products and giving consumers information to make responsible purchasing decisions.

3.7.3 FSC® certification

HS Baco Panels SRL had the CoC certification audit in 13.12.2021 and the FSC certificate was issued on 11.01.2022. The Finnish sawmill Luvia also holds an FSC CoC certification.

3.8 Social impacts

3.8.1 Stakeholder consultations

Since in Romania there is an active stakeholder orientation toward forestry, it is important that HS Timber Group organises face-to-face meeting events. In October 2022, HS organised the first face-to-face stakeholder consultation since 2019 in Covasna, after several online sessions had been held in the previous 2 years.

Compared with the previous face-to-face meetings before COVID, two conceptual changes were applied:

- Instead of a one-day event, we split the event into one afternoon and one morning session the following day.
 This allowed a social event at the end of the first day.
- Due to this method, the number of participants was limited. For the invitations we targeted the main suppliers
 for the sawmills in Romania, in addition to the most representative Forest Management Units, state
 authorities and the most important NGOs in Romania.

The participation rate was very good, as all the invited suppliers were represented directly by the administrators/owners of the companies, state authorities participated through the Forest Guard and Romsilva, while other representatives from forestry associations or private FMUs responded to our invitation. The invited NGOs did not reply or confirm their presence, unfortunately.

Participants were informed about:

- Legislation concerning corruption and competition issues in Romania
- Status of the current local and international wood market,
- Innovation of the modular bridge from Tomorrow's Forest Foundation
- Testing of LiDAR technology to improve the efficiency of wood volume measurement
- How PEFC certification can bring added value to wood products.

The second day focused on the practical demonstration of the modular bridge in the forest and how the LiDAR technology can be used to assess volumes of standing timber, piles or even trucks. This solution may soon offer an easy tool to assess the load in a few seconds and reduce risks related to volume deviations - as outboxing, deviation between delivery documents and real volumes.

3.8.2 HS' role in the Romanian wood market

In 2022 alone, HS brought 768 log trains to Romania for processing in the Romanian sawmills. In 2021, no less than 1,055 trains of 40 wagons each were brought in for processing.

In recent years, 50-70% of the total volume of roundwood processed by HS in Romania came from European Union member countries and beyond. HS does not export logs but produces in its mills only products with high-added value, such as sawn timber - the main product - but also panels, roofs, jointed products, glued timber - such as beams - different types of blockboards or pellets.



4 Sawn timber purchases and the DDS

4.1 Sawn wood and other material DDS

In HS' Supply Chain, over 90% of the processed material is purchased as roundwood. Other materials are purchased mostly for the following reasons:

- for top layer of board products (veneer)
- where roundwood input is restricted (Ukraine)
- for energy production (biomass in Romania)
- or for specific product characteristics (sawn wood from Romania, Austria, Germany).

The sawn wood traceability system differs significantly from roundwood traceability for three reasons:

- wood is subject to sawing, peeling, chipping and other significant changes, where hardly any mark or feature of the roundwood remains recognisable.
- there is mixing of different inputs in the sawmill, to the extent that in most cases, the relation between a single input and a single output cannot be identified⁵³.
- bigger sawmills purchase big quantities and sell to several buyers, therefore a single buyer cannot verify all
 inputs and verification is based much more on sampling.

Solid sawn wood purchases from third parties (intercompany deliveries excluded) stand at less than 10% of the total input. Since in sawn wood the DDS is also determined by country level risk assessments, only those countries will be described below where there is no roundwood input from.

4.2 Sawn wood supplying countries

4.2.1 Belarus, Russia

Because of the war between Russia and Ukraine, all input from Belarus and Russia is considered conflict timber in the PEFC system and subject to EU trade sanctions. Based on these regulations, HS Timber Group:

- stopped all import activities from Russia immediately on 25 February 2022.
- imported from Belarus in cases when both the contract and the DDS were performed before 2 March and stopped purchases before 4 June, as requested by the EU.
- continues to import from Ukraine based on risk mitigation measures implemented by the local HS staff employed
 in Ukraine and limits purchase range to areas directly not affected by military activities, in line with the EU
 Commission Guidance.

EU Commission Regulations

The EU Commission ban was introduced through the COUNCIL REGULATION (EU) 2022/355 of 2 March 2022, amending Regulation (EC) No 765/2006 concerning restrictive measures in view of the situation in Belarus⁵⁴.

Based on this Regulation, it shall be prohibited:

- (a) to import, directly or indirectly, wood products as listed in Annex X into the Union if they:
- (i) originate in Belarus; or
- (ii) have been exported from Belarus;

The prohibitions in paragraph 1 shall be without prejudice to the execution of contracts concluded before 2 March 2022 until 4 June 2022, or ancillary contracts necessary for the execution of such contracts.

EUTR regulations

The EU Commission expert Group issued an expert opinion⁵⁵ on 16 March about concerns regarding implementation of risk mitigation measures in Belarus and Russia.

Also, the Commission issued a Guidance document about the consideration of prevalence of armed conflict and sanctions in Due Diligence Systems – which helps to interpret the EUTR DDS requirements in Ukraine⁵⁶.

PEFC certification restrictions

⁵³ Common certification systems do not require full separation, only identification of certified/non-certified input.

⁵⁴ Publications Office (europa.eu)

⁵⁵ Register of Commission expert groups and other similar entities (europa.eu)

⁵⁶ Microsoft Word - Guidance conflict timber EG Agreed.docx (europa.eu)



All HS mills are PEFC certified, and HS' policy is to sell every product with minimum PEFC claim, as PEFC Controlled Sources, therefore, for HS Timber Group, the PEFC Controversial Sources requirements, including the conflict timber regulations, are binding. Currently, all input from Russia and Belarus is considered conflict timber, except if the DDS was performed before 4 March⁵⁷.

FSC certification requirements

One of the HS Timber Group factories, HS Baco Panels SRL, is FSC certified, and HS Timber Groups complies with FSC's Policy of Associations requirements. On 10 March 2022, FSC issued a series of normative instruments⁵⁸ to implement measures related to FSC certificates in Russia and Belarus to disable sourcing material from these countries. In the case of Russia and Belarus, by 8 April 2022 all certificates, except for forest management (with no trading of certified products), will have to be suspended for the time being.

4.2.2 Ukraine

HS Timber Group maintains an office and permanent staff to purchase sawn wood from Ukraine. The war imposed significant difficulties to wood trade, even if the main elements of the domestic DDS remained active (online public auctions, and national wood traceability system, media monitoring). HS' DDS is fully in line with the most recent collection of Policy Responses to Situation in Ukraine⁵⁹ issued by FSC and the local staff made all efforts to continue field verifications.

Audit type	Number of audits
CoC Extended Desk	2
CoC on-site	26
FM	7
Plot visit	3

Still, due to technical difficulties, input from Ukraine gradually decreased in the last quarter of 2022. Risk assessments and risk mitigation measures are regularly reviewed, jointly with the Ukrainian team and experts.

4.2.3 Ivory Coast, Cameroon, Indonesia, Serbia and Turkey

HS Baco Panels purchases veneer sheets from tropical countries mostly via European traders, but as customs is performed in Constanța, Romania, HS Timber Group is considered an EUTR operator in these cases.

The DDS is based on the following main risk mitigation measures:

- All export is subject to export permits, as these countries employ a ban on roundwood export.
- Even if there is no direct business relation with sawmills, all of them provide access to their business documentation, including concession licences, maps, harvest documentation, tax payments. This is usually called the "EUTR folder" which indicates that most of the buyers achieve EUTR compliance only by document review.
- HS processes all concession borders to know forest area limits. The company overlaps concessions with satellite photos to monitor forest degradation and changes in forest cover.
- HS also employs third party auditors to perform field verifications, including the CoC audit of the sawmill and plot visit of forest concessions, which is usually considered the strongest risk mitigation measure.
- Additionally, Indonesia is a member country of the FLEGT cooperation, therefore all input is covered with FLEGT licences, which currently meet EUTR and certification requirements.
- In Serbia and Turkey, where poplar is originated from plantations, there is no risk related to forest management, biodiversity, and the verifications only target CoC issues.

4.2.4 Board products from EU exclusively

Purchase of other material (veneer, fibre-, particleboards, LVL). Wood-based material - such as MDF or HDF - is only purchased from European producers and all input comes with certification, or from publicly declared wood origin controlling programmes, therefore considered low risk. The veneer input is used in Comănești and subject to a complex

⁵⁷ <u>Timber from Russia and Belarus considered 'conflict timber' - PEFC - Programme for the Endorsement of Forest Certification</u>

⁵⁸ <u>Updates published to clarify measures for organizations in Russia and Belarus | Forest Stewardship Council (fsc.org)</u>

⁵⁹ Collection of Policy Responses to Situation in Ukraine has been updated | Forest Stewardship Council (fsc.org)



risk mitigation programme, based on the FLEGT licence (Indonesia), third party verification (Cameroon, Ivory Coast) or contains low risk poplar plantation material.

4.2.5 Biomass purchase volume

HS purchased biomass (chips, harvesting waste, sawdust and bark) which was exclusively used in the mills' Combined Heat and Power plants. In 2022, 118,045 bdmt⁶⁰ were purchased from third parties, exclusively from Romania. Biomass is subject to simplified verification as it is mostly a by-product of the sawing process, but also included in the SUMAL reporting and traceability system since October 2020, when the definition of wood material was changed in the Forestry Code.

Summary of 2022 and plans for 2023

All key elements of HS' DDS remained active or were improved in 2022.

- All Romanian input is covered with the voluntary traceability system Timflow and state traceability system SUMAL. Timflow was maintained for all Romanian roundwood input.
- Full integration of SUMAL into HS' DDS was achieved, which helped the SCCC Department monitor HS' suppliers' truck movements
- The NP policy was kept in Romania and extended to Ukraine
- All mills maintain PEFC certification, Comănești received the FSC certification
- The suspension procedure was updated with clear indicators and consequences for administrative offences
- Legal background check is conducted in all high risk countries
- Third-party auditors were contracted for high-risk countries field auditing where HS staff is not available
- Full compliance with international bans and trade restrictions
- Daily media monitoring and active communication with stakeholders

Plans for 2023:

- Maybe the biggest challenge for any DDS is to be prepared for new EU legislation⁶¹, which will require much more information about forest degradation and deforestation.
- The main direction of the legislation will be agricultural products, but the wood industry will also be required to initiate full traceability of its products.
- Very likely the new so-called EUDR legislation will require additional improvements in the field of production level traceability - to be able to communicate to the buyers the possible plot coordinates where the wood originated from.
- HS will continue to support certification of private forests in Romania and the primary goal it to create a group FM certificate, where all interested Forest Management Units will join.
 - It is necessary for the traditional certification system to improve its verification methods. HS Timber Group is involved in dialogue with certification systems, in order to develop generally applicable risk mitigation measures of certified materials.
- As one of the main risk factors in Romania is the obsolete skidding technology, HS will provide different levels of support to suppliers to invest in advanced technology and thus reduce environmental impact in harvesting
- HS is continuously seeking for the most advanced scientific technologies of wood traceability. A key area is represented by high-risk countries. Isotope testing of purchased wood offers the possibility of verifying the origin with the accuracy of approximate 100 km. Sample collection of Ivory Coast veneer is ongoing, to be able to create an isotope map, which can be a basis for further verifications.
- The first tests of measuring truck volume using the LiDAR technology was initiated in 2022 and will be continued in 2023, to test if this technology can ease the process by using mobile devices. This tool can offer the possibility to settle the ongoing debate about truck over volumes and can be integrated into HS' Supply Chains.

⁶⁰ bone dry metric tonnes

⁶¹ Proposal for a regulation on deforestation-free products (europa.eu)





Picture 9. LiDAR image for volume measurement