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## **Flexible Sleeper Berth - Online Carrier Application**

Thank you for your interest in the Flexible Sleeper Berth Pilot Program. Before drivers may be enrolled in the study, the company must give permission for their drivers to participate. As the company representative, please read through the following study description and determine whether you, on behalf of your company, grant permission for your drivers to participate. If you have any questions, please do not hesitate to contact the research team.

During FMCSA listening sessions for the HOS rulemaking, many drivers requested regulatory flexibility to be able to sleep when they get tired or as a countermeasure to traffic congestion.

Laboratory studies have demonstrated that a split sleep schedule, with the same total hours dedicated to rest divided between two periods, can result in as much or more total sleep time than a consolidated daytime sleep schedule.

Maintaining and improving driver rest and alertness is a priority of the Department of Transportation (DOT) because driver alertness is directly related to safety. Changes to the FMCSA HOS regulations must be data driven and support driver safety. To determine whether the more flexible HOS regulations provide the same or better driver rest and alertness than current regulations, a study must be conducted with CMV drivers.

**The purpose of the Flexible Sleeper Berth Pilot Program is to conduct a field research study to demonstrate how regulatory flexibility for sleeper berth (SB) use could be used to improve driver rest and alertness.**

**In order to participate, drivers must have permission from their company (unless independent).**

**Why should you allow drivers to participate?**

- Previous research indicates that split sleep has the potential to improve driver rest and alertness
- Drivers would gain the regulatory flexibility they have requested during their period of enrollment
- The data may be used by FMCSA to inform future HOS regulatory changes

**What regulatory flexibility is given to drivers during the study?**

During their period of study participation, drivers will be provided with an exemption from the requirement for consolidated sleeper berth time.

Under the exemption, drivers will still have the following current regulations in effect:

- 11 h driving limit
- 14 h duty limit
- 34 h restart
- 30 min breaks required

**Under the exemption, drivers would be allowed to operate under the following rules:**

- A driver may split their 10 hours of required SB time into two periods ( $\geq 3$ h)
- Any SB period that is part of a pairing (the two periods together totaling 10 h or more) is excluded from calculation of the 14-hour duty period
- When the second SB period of a split occurs, the recalculation of the 14-hour duty period starts at the end of the first SB period
- During each duty period, drivers may choose to operate under either the current HOS regulations or the study-related exemption. No mixing of exemption and non-exemption is allowed in the same duty period

**Flexible Sleep Details:**

- While enrolled in this field study, drivers will receive an exemption issued by the FMCSA to the current HOS sleeper berth provision, found in 49 CFR Part 395.
- The exemption applies only to drivers during their period of enrollment (max 90 days).
- Participating drivers will be provided with an official form from FMCSA to present at inspections verifying their participation dates.
- Companies will be notified which of their drivers have been issued this exemption as part of the study (and the enrollment dates), as their HOS compliance will be determined differently than drivers not in the study (operating under the current HOS regulations).
- FMCSA will also be notified of the identities of participating drivers for the purpose of issuing the exemptions. However, FMCSA (as well as the carriers) will not have access to study data from individual drivers.

*I have read the above description of the sleeper berth exemption, to be issued to drivers in the Flexible Sleeper Berth Pilot Program. I understand that drivers participating in the study will be authorized by FMCSA to operate under this exemption during their period of enrollment.*

**How are drivers enrolled in the study?**

- Drivers who are interested in participating should visit the website for more information: [www.sleeperberthstudy.com](http://www.sleeperberthstudy.com)
- Drivers who complete the online application will be contacted by the research team to discuss their eligibility and potential involvement in the study.
- For drivers who are not independent, a company representative must grant permission for participation.
- Drivers will be considered for participation based on eligibility, study recruitment needs, and geographic location.
- Drivers will have an in-person briefing session with a member of the research team. They will be trained on data collection procedures, issued study equipment, and asked to sign an informed consent form. Drivers who are then enrolled will be issued the necessary exemptions from FMCSA.
- Over 200 CMV drivers, sampled from different carrier sizes and including owner operators and team drivers, will be enrolled.

#### **What type of data is collected in the study?**

- Sleep data will be collected with a non-invasive, watch-like device (called a wrist actigraph), a sleep log, and a self-report sleepiness scale
- Safety-critical events while driving will be measured with an onboard monitoring system (OBMS) by SmartDrive, installed in the truck by the research team
- Duty and driving times will be monitored with an electronic logging device (ELD)
- Reaction time performance data (a measure of fatigue) will be collected 3–4 times daily with a 3-min test on a smartphone application
- Caffeine consumption will be logged on a smartphone app
- Roadside violations will be collected with the Commercial Driver's License Information System (CDLIS)

#### **Onboard Monitoring System (OBMS) Details:**

- The vehicle instrumentation includes a camera that records the driver's face and upper body when in the driver's seat and a second camera facing out the front of the truck at the forward road.
- Video is recorded in 30-second snippets (15 sec before/15 sec after) surrounding an event of interest (e.g., hard braking, speeding). Corresponding vehicle data is also collected for the event.
- All OBMS data will be encrypted at the time of data collection and will be decrypted only once it arrives back at SmartDrive and will be stored on a secure server. Access to the video and audio will be limited to SmartDrive personnel and the study team only.
- In the event of an accident, there is a risk that the video and vehicle parametric data could be obtained in conjunction with a government inquiry or in litigation or dispute resolution. However, under normal circumstances the identity of the driver and the company they work for will be kept confidential. Additionally, if a driver is involved in a

crash while participating in this study, they are under NO LEGAL OBLIGATION to voluntarily mention the data collection equipment or their participation in this study at the time of a crash or traffic offense.

*I have read the above description of the onboard monitoring system that will be used in the Flexible Sleeper Berth Pilot Program.*

**Electronic Logging Device (ELD) Details:**

- ELDs currently in place by the company/driver are not equipped to handle the rules of the sleeper berth exemption. The ELD would incorrectly reflect the available duty/driving hours and overall compliance when a driver enrolled in the study is operating under the sleeper berth exemption.
- An ELD system will be provided to drivers enrolled in the study that can accurately reflect their available duty and driving hours, as well as overall compliance, under current regulations or under the study-granted sleeper berth exemption.
- An exemption will be provided to drivers from FMCSA so that they may have their existing log system in place, in addition to the study-provided ELD system. This will include an official form from FMCSA to present at inspections verifying their participation dates.

*I have read the above description of the ELD which will be used in the Flexible Sleeper Berth Pilot Program. I understand that drivers participating in the study will be authorized by FMCSA to use a second duty log.*

**How will the data be used?**

- The research team will measure the sleep, driving performance, and alertness throughout each drivers' period of participation (up to 90 days).
- The research team will classify duty periods as having nighttime sleep, daytime sleep, or split sleep (under the study-granted sleeper berth exemption). Data from each category of duty period will be compared.
- The research team will assess whether, from a sleep and fatigue perspective, the flexible sleeper berth approach is "as safe as" or "safer than" operating under the current HOS regulations, which require a single daily consolidated rest period of 10 hours, or a SB period of 8 hours with an additional 2 hours off-duty (per the current "8+2" sleeper berth provision).
- A final report with the study findings will be submitted to FMCSA. A de-identified public use data set will also be produced, with no information that is individually identifiable to the driver or carrier.

Name (first, middle initial, last): \_\_\_\_\_

Telephone (work): \_\_\_\_\_

E-mail address: \_\_\_\_\_

Company Name: \_\_\_\_\_

Job Title: \_\_\_\_\_

Approximate # of Trucks in Company: \_\_\_\_\_

- I give permission for drivers in the previously named company to participate in the Flexible Sleeper Berth Pilot Program field study.*
- I give permission for OBMS and/or ELD equipment to be installed in the vehicles of participating drivers for a period of up to 90 days.*
- I give permission for drivers enrolled in the Flexible Sleeper Berth Pilot Program to use the study-provided ELD system (under the exemption allowing two logs).*
- I understand that driver data, with the exemption of the ELD duty data, is to remain confidential within the research team and will not be shared with myself or others at the company. This includes OBMS video and driving data, sleep and sleepiness data, performance data, and caffeine data.*

Comments... \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Thank you for your interest in the Flexible Sleeper Berth Pilot Program!

To complete your carrier application, select 'Submit' below.

We will review your application and contact you by phone or email to discuss the potential study participation of your drivers.