

## **Summary**

### **Deliverable 3.1 Methodologies for a holistic fitness to drive assessment**

#### **WP3**

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Overall, Work Package 3 has two aims. The first is to identify, select, and specify the criteria and the thresholds for a holistic Fitness to Drive assessment that covers driver impairment due to alcohol, drugs, medications, mental fatigue, stress, and cognitive demand when drivers are off-duty, on-duty, during on-site assessment or roadside assessment. The second is to specify which measurements/signals/variables are needed from which sensors and what thresholds are to be used.

This deliverable reports on the work of WP3 during the first 16 months of the project. To this end it presents the types and sources of measurements needed, along with information on how the measurements should be taken, in what conditions, and how often, in order to form a holistic Fitness to Drive assessment (i.e., for off-duty or on-duty assessments, as well as for on-site and roadside assessments).

The deliverable also describes the details of the individual systems selected as part of the holistic Fitness to Drive assessment in PANACEA including, threshold, categories, system characteristics, and how each system measures different types of impairment states. Further, it describes the different output scores from each system, as well as the importance of the different measurements in quantifying the “fitness-to-drive” metric.