



## Initial project findings: Focus Group

### *A1.2 Riders' Needs and Wants*



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- Objectives of the activity on “Riders’ Needs and Wants”
- Structure and organization of the Focus Group
- Results of the Focus Group
- Conclusions
- ...and beyond



- Identification of requirements (**needs**) to increase the safety level (i.e. how the Saferider devices could be beneficial to increase safety from the perspective of experienced riders).



**FOCUS GROUP**

- Capture riders' **wants** in terms of desired devices/improvement of P2W in order to enhance safety.



**PUBLIC SURVEY**

# Focus Group: members



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1st User Forum Meeting

Brussels, Belgium

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- Advanced Driver Assistance Systems (ADAS):
  - speed warning
  - curve speed warning
  - frontal collision warning
  - intersection support
  - adaptive lighting (road tracking headlight)
- In-vehicle Information Systems (IVIS)
  - eCall
  - telediagnostic services
  - navigation and route guidance
  - weather, traffic and black spot warnings
- Human Machine Interface (HMI)



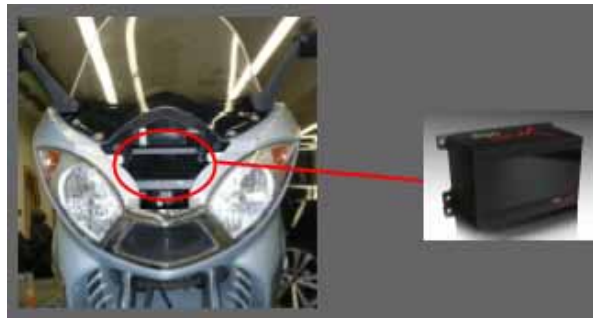
- The panel was not unanimous about possible benefits of this functionality.
- Main observations were:
  - the best control for speed is the riders' experience and consciousness of the environment;
  - there shouldn't be an excessive amount of information towards the rider;
  - the system should be passive (i.e. no automatic action on the P2W);
  - mostly beneficial for novice riders since
    - it could help them to regulate their speed more in favour of speed limits;
    - they have the tendency to miss signs.



- The panel found that such a device is extremely difficult to develop for several technical reasons:
  - the main problem for several road accidents in turns is often the lack of knowledge of the appropriate riding technique;
  - tyres, road surface and visibility are very important and their effects should be taken into consideration for the evaluation process.
- The device should be adaptive to the rider and to its riding style (i.e. to have learning/warning modes).
- Based on the observations the evolution of the function into a “**curve severity warning**”, which informs if the severity of a curve is underestimated, should be taken into account.



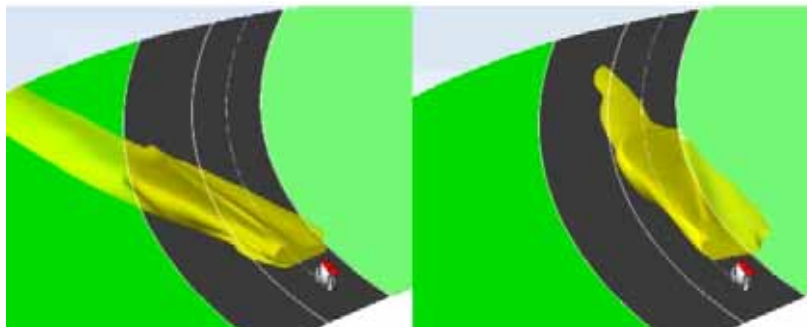
- *“Great device for ... cars!”*
- Considered to have a great beneficial effect, but strong concern about the difficulty for its development.
- It should be designed paying attention to:
  - discrimination criteria among false alarms and real dangerous situations (i.e. robustness);
  - time for riders' reaction;
  - type of braking system installed (with/without ABS, ...).
- The most beneficial application is foreseen especially for young riders on scooters and mopeds.





- Considered a device with an enormous potential impact, similar to frontal collision warning, but with an higher level of difficulty.
- Mostly cited the robustness of the system because of:
  - the enormous complexity of a real urban environment and the quantity of information to be taken into account;
  - the selection of the information transferred to the rider in order to avoid saturation.
- On such a complex system, the panel would like to have more information and the possibility to test the device.

# Results: road tracking headlight



- Panel not unanimous, mainly based on the their typical environment for rides.
- Trainers in favour point out the necessity to develop the tracking algorithm properly so that the light really follows the road, taking into account the appropriate roll angle of the PTW.



- The functionality was considered very useful for scarcely populated areas.
- Panel called for a robust behaviour to avoid false calls.
- Some proposals for implementation:
  - sensors that measure biological parameters (i.e. blood pressure, heart rate);
  - activation possible only if the bike is running;
  - button to reset the system, in case of a false call.



- Considered very useful to monitor tyre pressure and brake functionality.
- To increase the spreading and modularity it was suggested that the system should be:
  - affordable;
  - based on a open format.
- In any case it shouldn't be used for:
  - law enforcement;
  - verification by the manufacturer of the breach of warranty conditions.



- Positive acceptance, however some criticalities were identified:
  - the transfer of information towards the rider (i.e. modality);
  - avoid overloading of the rider with an excess of information;
  - update rate of information.
- The latter is of the utmost importance in case the system is integrated with safety functions, and thus the rider fully relies on it.
- In terms of modality the majority of the panel suggested that information should be transmitted visually although refocusing should be avoided.



- Very positive acceptance but there should be an high update rate of the information (most important condition).
- Weather:
  - temperature is the most important information because linked to extremely local dangerous conditions (i.e. ice);
  - organized in 2 stages: planning and current situation;
  - weather information is important and useful especially if there are micro climates. The most beneficial effect should be to rise the level of attention of the rider.
- Traffic: could be useful, but again it is crucial the update rate
- Black spots would be an highly appreciated feature.
- In all cases information should be tailored for the area of interest for the rider.



- How all these information and warnings will be combined and sent to the rider? **Please avoid overload of the rider!**
- Each rider should be free to select the desired information.
- Simplicity of signals: i.e. vibration but only one type, not one for each warning.
- *“No batteries, any vital device should be on the bike”* applies to HMI as communication path for warnings.
- Suggestion to use lights in the mirrors to warn and then give more detailed information on the dashboard (only the essential ones).



- The devices/functions reputed more promising were also considered the most difficult to develop.
- Strong demand for robustness also in real world environments.
- Everything should have the possibility to be turned off.
- HMI:
  - pay a lot of attention to fuse all the warnings;
  - to prioritize them and to transmit to the rider the most important ones in order to trigger the appropriate reaction.



- Currently the public survey is available on line at:  
[www.fema-online.org/survey/index.php?sid=91175&lang=en](http://www.fema-online.org/survey/index.php?sid=91175&lang=en)
- or more simply from the FEMA website:  
[www.fema.ridersrights.org](http://www.fema.ridersrights.org)
- During the first 5 days **more than 900 questionnaires** were collected, but ... **we would like “X thousands”**
- **Please help us and disseminate the link to all the riders, independently of their age and of PTW ridden !!!**  
(the survey will close on 31st July)



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**Enjoy a safe MEP ride !!!**