**Minutes of the CO2MPAS-Team meeting 21/02/2017 – VELA meeting room**

**Attendees: Giorgos, Alessandro, Iker, Kostis, Vins, Biaggio, Jelica, Mihalis, Victor, Dimitris**

1. **Introduction**

* General presentation of the CO2MPAS project:
  + General purpose of the software
  + 360° vision of the tasks done through the past 3 years
  + Challenges faced: software development, regulation drafting, political implications…
* Welcome to Iker and quick tour-the-table of the CO2MPAS-Team members

1. **Current status of the team’s projects + follow up**

* CO2MPAS-software:
  + Stamp released on 10/02/2017.
  + Official release will be the 01/09/2017. To achieve it the following calendar is desirable
    - Code-freeze for core CO2MPAS model: 01/06/2017
    - Software (All-in-One, Dice) finalized on 15/07/2017
  + Winter & Spring tasks:
    - user support on Stamp release (CO2MPAS mail + github)
    - bug-fixing for known and unknown issues
    - Run extensive model configuration experiments to establish the final model default parameters (~5000 simulations)
    - Model validation on Stamp (WLTP, NEDC)
    - Invite and support users to test DICE (TUV NORD, UTAC?) + elaborate a fully functional DICE implementation in CO2MPAS-GUI
* WLTP testing/CO2MPAS mock-up activities (if collaborators aim to collaborate)
  + LAT vehicle?
  + Iveco Light Commercial Vehicle?
* Development of Hybrid module for CO2MPAS
  + Foreseen for 2018 CO2MPAS version
  + Alessandro PhD project, implementation of Claudio’s code
  + UTAC vehicle to be tested
* GAP Project: assess the gap between real world fuel consumption and the type-approval fuel consumption
  + Ongoing collection of data with 1 vehicle with different drivers/trips
  + Already 1 month of data, foreseen 6 months
  + Giorgos offers data on FC of his Prius
  + Vins offers 1-month data logged in his Fiat.
* WLTP 2nd act + Transparency Task Force
  + Biagio/Jelica ongoing activities
  + Desired parameters for TTF already settled by JRC but yet to be defended in meetings with other stakeholders
* VECTO-software:
  + Development and data validation currently ongoing by Nikiforos (he will join the team in the coming months)
  + 1st level user support: Victor will train Dimitris on how to proceed. Victor is asked to provide simple statistics on the past/current user support activities to evaluate the needs of this activity
  + Kostis has to provide a temporary solution for hashing VECTO files by summer 2017 as a first step towards the full signing/hashing solution requested for VECTO by ~January 2018.
* Definition of CO2 targets for HDV
  + Proposals to be made in the base of the current VECTO-based monitoring activities
* Development of a Fuel Consumption database for LDV
  + To do: DB design (“*Doesn´t need to be the best ever DB but something flexible and scalable that does the job*”)
  + To do: Populate DB
* U-SAVE: fUel-SAVing trip plannEr Proof of Concept: the trip planner aims at providing individuals and companies with a tool to calculate optimal routes according to fuel consumption.
  + To do: development and implementation of the routing machine
  + To do: prepare and test the trip planner (desktop software + smartphone app)
* [Greendriving tool](https://green-driving.jrc.ec.europa.eu/#/). Not particular requests but considering it is our most publicized project, some care has to be taken to improve the tool if possible (take out Lorenzo from the loop).

1. **Side/desirable activities**

* Develop a CO2MPAS coast-down application:
  + to be fed with dyno coast down times
  + Will provide WLTP road loads
* Make the most of the set of vehicles that will be tested in VELA in the context of RDE activities:
  + Define and populate a comprehensive database with all the inputs required for CO2MPAS.
  + Develop a cycle of regular pulses of acceleration to be run by different drivers that will constitute the basis for a driver-model to be included within CO2MPAS-Forward Looking
  + Develop a cycle to be run for each vehicle that can be useful to identify the gear box ratio of the vehicle (The Makis cycle?)
  + Develop a cycle to be run at the end of a WLTP (ie hot vehicle) that can help identifying the vehicle full load curve (with vehicle on 2nd gear and 1000 rpm, accelerate full throttle until reaching the dyno max speed)
* In-Service-Conformity with CO2MPAS. Preparatory steps to stand in a good position in a near-future to propose CO2MPAS as tool for ISC
  + Benchmark CO2 emissions of CO2MPAS with EMROAD
  + Prepare CO2MPAS to be calibrated with RDE data and predict WLTP CO2 emissions
* Start thinking on a FW CO2MPAS that can make use of the ad-hoc driver model. Activity linked with the development of the CO2MPAS for hybrid vehicles.
* Start thinking on a CO2MPAS model able to predict the energy consumption for electric vehicles
* In the context of Autonomous Road Transport, Biagio is writing a proposal for a project on connected vehicles to cooperate with the JRC team on cybersecurity and communication of vehicles.