

# VEDI-2 USE CASE CONF CALL

Wednesday, July 25, 2012

10:29 AM

## MINUTES OF CONF CALL ON JULY 25TH 2012

- PARTICIPANTS:
  - Daniel Buhrig, Benjamin Prestele - HHI
  - Olivier Pothier - ST-France
  - Bernard Puel - ST-E
  - Paul Chippendale - FBK
  - Selim ben-Himane - Metaio
  - Mathieu Razafimahazo, David Liodenot, Yohan Lasorsa - INRIA
  - Viviana D'Alto, Stefano Bosisio, Paolo Pasteris, Valeria Tomaselli - ST-Italy
- NOTES:
  - Viviana provided a short summary of what was discussed during the face-to-face meeting in Valencia in relation to VEDI-2 use cases, and a reminder of information shared by e-mails after posting the VEDI-2 Use Case Xcel file in Steerforge. It is clear there is uncertainty in relation to indoor/outdoor scenario merging video capabilities and sensors one.
  - Paul said that with VEDI-2 demonstrator we need to have integration of video processing and sensor processing for indoor navigation, as all algos should be available. Since Jacques stated that supermarket scenario can be more complex than a public building, due to the noise, presence of moving crowd, etc., possibly a public library or a museum could be a better scenario.
  - Olivier said that a very important part is related to test and validation of the various algorithms integration, for which we need to replicate the demo scenario at the various partners' sites, to validate the system and algos at different levels. We can have to steps:
    1. Algos working in off-line mode, with a specific database of sequences, created by the various partners;
    2. Real-time validation, for which we could use a specific room setting to validate changing light conditions, network issues, CPU overload, etc.
  - Paul says that creating a specific set-up in all the premises could be expensive, and possibly the algo integration could be provided to one of the partners for testing, to provide feedbacks.
  - Viviana says that the test and validation process is complex, each algorithm has its own specificities, and it is difficult for a single person, who possibly doesn't know the algo itself, to do this checks alone and provide specific feedbacks. So some replicable set up at each premises is recommended.
  - Paul asks Selim to provide his opinion, as Metaio is serving several customers and different scenarios. Selim says that they made trials in a couple of Museums, but it is important to have some expert people to make the tests and tuning.
  - Selim says that in his opinion a supermarket/mall set up exploiting video could be interesting not only for visually impaired people, but also for employees looking for specific products in difficult positions. Also, at least a set-up with two rooms has to be envisaged in case of specific set-up to be closer to the supermarket set-up.
  - Benjamin says that we could think to have a scenario a station, where we should have no problem to take videos. Viviana says that this scenario is very complex, with a lot of noise, and people moving, beside changing light conditions. Stefano adds that in Italy we need to ask for specific authorization to get videos in public buildings/offices.  
Benjamin proposes a mall set-up which can be present in various countries, such as Ikea. Viviana says it can be a good idea, but we should decide how to move to get their ok in various sites/countries. It can take time, so it could be better to start with a specific set-up at each premises while waiting.  
Benjamin proposes a Museum or Library. Viviana says that we have the problem of the testing/validation phase, since we should have people going into a specific place for days, in various periods, and this is not affordable. Possibly with VEDI-3 it should be easier as some integration and algo test should be done in VEDI-2.
  - Viviana says we need to discriminate the two situations:
    - Testing and validation of algo integration, for which a specific set-up at the various

- premises could be ok;
  - Final demonstration scenario, to be shown to PO.
- Selim adds that Supermarket scenario can be tougher due to movement vs a Museum. How long could it take to Inria to calibrate their PDR solution within a specific scenario of about 50 sqmt? Yohan answers that PDR should require few minutes. It is more complex to create Open Street Maps (OSM) model. Olivier asks if INRIA could handle generating the OSM model to the partners in a restricted area where we decide to place the preset scenario. Yohan answers positively, but he needs to have location info/map/specificities. Having these inputs, they could work also remotely. Olivier states that this could solve the problem related to the testing/validation.
- Valeria says that, discussing with Jacques, it appeared that a "lift" situation where visually impaired people are helped in selecting the floor could be envisaged, based on video analysis.
- Paul says that FBK is in contact with a local supermarket to check whether they are interested to support for VEDI-2.
- Summarizing the final part of the discussion among the partners, it looks like that the selected approach will be the following to start:
  - Test & Validation: the partner will agree on specific shelves, low cost, that can be bought at IKEA and that can be placed in the various partners' offices. The shelves will be filled with specific products that will be decided together, such as Kellogg Corn Flakes, Nutella, etc. so that the shelves set-up will be the same. The various partners will provide a map/configuration information to INRIA to build the related OSM model, that will be needed. Possibly, we could also add the possibility to exploit PDR from the building entrance to the elevator, and then in the elevator exploit the video mode to identify the floor. Inside the office, video mode will be enabled as well as other sensors. In this set up we can control the number of people moving, the light conditions, etc.
  - Final Demo Scenario: We need to further discuss on this, but we can start by enlarging the set-up of shelves in a specific premises to show a more complex situation.
- As action items, Viviana will:
  - Provide minutes of the call;
  - Update the xcel file according to the Test & Validation scenario.
  - Try to organize a call next week (considering several people will be on holidays).
- Partners are kindly requested to contribute to the Xcel file with their comments. The Xcel file could be used also to decide the Set-up configuration in terms of kind of shelves, products, etc.