General comments

1. First, Well-done! As a reminder the idea behind this stage in the project is
   1. To give both sides – the client as TandemG and you as the developers a mutual understanding as to what needs to be done
   2. The ability to discuss different aspects of the project with a shared base
2. As an HLD we are still missing some details that are required – are listed here and in the document
3. Formatting – when writing a document keep numbering on all headers in the document and make sure to keep the heading levels, We modified your document to include header numbers – this is meant for easy reference, such as “On article 9.4 a detailed schematic is needed”. It also eases document review by jumping to the correct header in the navigation pane
4. When asked to provide a sequence diagram in the following chapter
   1. Use <https://sequencediagram.org/> - it is a great free tool to use
   2. please make sure to save a copy of the text file for when corrections are needed
   3. It is a very powerful tool that enables much more options and it is worth getting to know

Design comments

* Art. 9
  + There is a need for a schematic describing packet flow. I.e. describe Packet flow starting from the Air, to receiving processing packing and transmitting to the HPC
  + Details regarding RPi configuration and SW elements what is running on the device what are its responsibilities and communication methods between SW elements
* Art. 9.1
  + Describe the communication infrastructure between elements, I.e. on each arrow there should be a detail on what infrastructure it is using, I.e. ethernet, USB and so on
* Art. 9.3
  + Describe the commands flow in sequence diagrams. This will be useful to understand what it takes to send these commands.
  + Describe the structure of the message. TCP and UDP describe the network protocol to transfer bytes, but they do not describe how the message looks like. Is it a JSON? A bare string? A number? An object?
* Art. 9.4
  + Describe communication between components in the schematics. The flow of the information should be described using sequence diagrams.

Missing details

* There is a need to detail all SW elements on block level (class diagram). For example
  + HPC Plugin – packet handling
  + RPi Wi-Fi configuration
  + RPi packet handler
  + RPi message sender
  + And so on…
* Who is responsible to send configurations from HPC to RPi? What SW element? What UI are you using? The plugin via Wireshark? Or a separate command-line application\tool?
* How are you configuring the Wi-Fi on the RPi? Script? C-application?
* Are you using a multi-threaded model on the RPi application? If so please describe the threads and what is the purpose of each? How do you communicate between one and the other?
* Describe in detail the data transfer between devices – from received packet to the send frame. Add visual representation of the packet format and structure
* How are you capturing the raw packets – please go in to detail. Try and find and example online maybe try and run the example to test that it is working? This is a major open issue as this might change the SW implementation on the RPi  
  maybe research the Wire-shark documentation and find out how it captures the packets the Wireshark project has a great wiki you can read
* What are you doing with the packets prior to sending them out to the HPC
* Please detail how are you managing the communication between HPC and RPi? On what type of medium? Ethernet \ USB? IP management in-case of Ethernet – static? Dynamic?