

Please see the below additional answers for bidders questions.

Also see additional attachments for support.

1. Maintenance records for hydrant pits and valve chambers
2. Recent TCS reports

The following questions still need to be addressed:

1. We would like to request a full diagram of the fuel line system pertaining to both the Delta and Golf Aprons. **SUPPLIED**
 1. Please also include the pipeline material composition, and also details of lining and other pipeline documentation as available. **(The pipeline is not lined)**
 2. We have received conflicting reports with regards to the decommissioning and the specific reason for the decommissioning of the Golf Apron, can we please receive more details on this as it does have relevance to how one should approach the project. **SUPPLIED**
 3. We would like maintenance records for the Golf Apron, including VCDs 1,2 and 4. This should also include all of the following:
 1. Cathodic protection reports for the above noted sections **SUPPLIED**
 2. Reports, or a summary thereof, of the maintenance conducted on the above line / chambers / hydrants as well as relevant notes for at least the past 2 years. It may be tedious to include all documentation for conducted maintenance, however any issues, water reports and potential leaks should most definitely be noted. **(See the attachments for at least 12 months)**
 3. Records of the TCS system maintenance and any issues and reports pertaining to the TCS systems and their current efficacy. This should also be a Hansa Consult product, so their most recent calibration / inspection documentation would also be appreciated. **(See the attached recent TCS reports. Unfortunately, we have just calibrated the system I will have the calibration certificates in the next week or two).**
 4. I would like clarity with regards to the stipulated scanning frequency of the Golf Apron pipeline. It was noted that contractors could consider GUL scanning, however after in depth analysis I must raise this as a serious concern for ACSA, as the efficacy of GUL scanning is limited to approximately 10m from the site of the GUL unit attachment. And given the length of the pipeline would leave a large amount of pipeline unscanned and to the best of our knowledge, the pipeline has been left standing for over 10 years without utilisation and Jet A-1 movement. As you know, Jet A-1 has an approximate lifespan of 1 year however without regular mixing and movement, the fuel will chemically degrade and separate leaving water and a petroleum sludge, and given the low oxygenation environment leaves the possibility of bacterial growth and also water throughout the line leading to rusting and weaknesses (hence the reason for this tender), and the CP system would only prevent degradation to the external surface of the pipeline. Therefore there are potentially large areas of the pipeline that are sitting with water internally and whilst the lining should theoretically potentially protect the internal steel from degradation, any weld points and joins will be completely exposed which is a significant risk not to mention that the lining is generally not designed to be left with settled material for such a long period

(which is why we are requesting the original lining specification). I would like to propose that ACSA institute a minimum scanning frequency of at the very least <10m so that all bidders might be able to prepare a bid which is at least considerably balanced at the evaluation stage. (We have provided clarity on this one. The intelligent piping method should be used NOT GUL) And all bidders should quote on the basis of the intelligent pigging

1. Other aspects such as thickness reports would be inconsequential if a lesser scope of pipeline inspection were to be considered.
5. What is the current fuel level in the Golf Apron Pipeline? What liquid volume is expected to be within the pipeline? PARTIALLY PROVIDED AS IT IS NOTED THAT THE PIPELINE IS NOT CURRENTLY HELD AT PRESSURE THEREFORE <100% FULL (The Golf pipeline is full of fuel, possible with some contamination. The volume of fuel inside the pipeline is 125 000 litres)
6. What is ACSA's intention with regards to the fuel currently in the pipelines? Notes have been made with regard to safe disposal however it was also potentially discussed that the fuel be returned to the fuel farm. In this scenario, what is the capacity of the holding tanks available at the fuel farm, and how does ACSA envision the return, given that the fuel cost, should be included in the tender pricing would be excessive should it be found to be unsuitable, which is of course the expectation given the current circumstances. (The contractor will need to sample the fuel, and if it is found unsatisfactory then the contractor will need to quote for a suitable method to handle this fuel, it can be disposal, returning it back to the source at a certain price, selling it at a lower price etc. The contractor will need to evaluate the best and effective possible way to handle this fuel)
7. The appropriate pigging of the fuel line will require a flushing of the line with approximately 2-3x volume of the line, will this fuel be provided by ACSA? The flushing would only take place after the appropriate pigging which should remove a large amount of contamination, however there is no possibility of a 100% guarantee that the fuel will be returned to the pipeline in a usable state. How does ACSA envision the risk on this? (The contractor will obviously start by cleaning the pipeline by piping it etc. But once the pipeline is confirmed clean, the fuel for flushing will be provided, however, the contractor will need to contractually commit that this fuel will not be contaminated since the pipeline will be clean, thus after flushing the fuel can be sampled, tested, and returned back to system)
8. Which delta hydrants are currently in use? (All Delta hydrant pits are currently operational. The valve chambers that might be able to assist with launching and receiving of your tools are VCD1, VCD2, VDC3, VD4, VD5, VCD6. The contractor will have to assess the suitable chambers and then assistance operation wise will be provided to facilitate this)