

VERT[®] Newsletter 01/2014

VERT[®] Invited for DPF Retrofit Project in Tehran/Iran – 2000 Public Busses

T.: +41-56 442 1818
F.: +41-56 442 1810
E.: vert@jcag.ch
www.vert-dpf.eu

In January 2014 the City Council of Tehran has decided to mandate broad DPF retrofits for the public bus fleet of the capital of Iran. The mandate pointed out the need of a pilot test, followed by a large scale fleet project – 6000 public busses are affected, in the first phase 2000 busses are targeted.

For this project, which was already published in Tehran Newspapers, consultants of the VERT[®]-association have been invited by AQCC (Air Quality Control Company), based in Tehran. AQCC is the lead contact in Iran to organize this big DPF retrofit project. In late December 2013 they have arranged an exciting visit program for our VERT[®]-consultants and meetings with important representatives of the parties involved in Tehran including those of Tehran city bus company.

Tehran City, with about 8.5 Mio inhabitants, is located south of the Alborz mountains at an average elevation of 1200 m above sea level. It has been facing more and more air quality problems over the last years. The criteria pollutants in Tehran are PM2.5, PM10 and NO₂.

First steps to start the program have already been taken. The City Council decided to align the verification process to VERT[®]. It is planned to accredit a lab in Tehran for VERT approval of DPFs for Iran.

Manufacturers will be compensated for the tests and retrofit of 2000 DPFs is budgeted

Legislation is in preparation that allows only VERT[®]-certified DPFs to take part in the first dyno measurements similar to VERT[®]'s VFT1 procedure. The two most common engines are Mercedes Benz OM 457 and MAN D2066 LOH12 engines. These engines are well known to VERT[®]. The engine test will start with Mercedes Benz OM 457. Hundreds and hundreds of busses with this engine all over Europe have already been retrofitted with VERT[®] approved technologies. In a second

step, busses will be equipped with the DPFs and then tested under operation conditions.

The easiest way to participate in this project is to become a VERT[®] member. Sign in to VERT[®] association with the application form below and get more information about your business opportunity in the DPF project in Tehran. For more information about VERT please refer to www.vert-dpf.eu.

The next VERT[®] flyers will inform you about our activities in other new markets and VERT[®]-projects. **Become a VERT[®] member and join the VERT[®] Forum in March 2014**

Don't forget to save the date:

March-21, 2014 VERT[®]-Forum,
with a lot of interesting information about the global aftertreatment market and latest news about legislation and technology.



Vehicle	Engine	Emission standard	Quantity
O457	Mercedes OM457 LA	EURO II	1319
MEGATRANS	Mercedes OM457 LA	EURO II	79
SHAHAB	Renault MIDR 062045C4	EURO II	589
SCANIA	SCANIA DC921	EURO III	380
AKIA	CUMMINS C30020	EURO II	268
YOUNGMAN	MAN D2066	EURO III	200
KING LONG	MAN D2066	EURO III	425

Facts about Tehran City bus fleet:

Most of the busses in Tehran have engines with emission standards EU II or EU III.

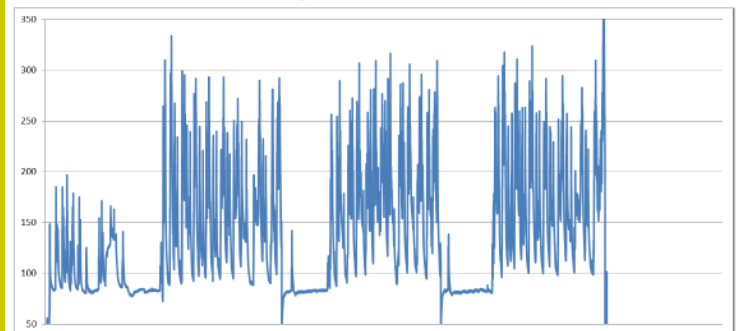
The average bus age is 5.9 years. They daily serve a total route length of 2908 km with 4131 stations.

Technical challenges range from the Diesel quality – the average measured sulphur content is higher than 250 ppm – to lubricants quality – the ash content is very high.

Additionally, the exhaust temperatures are usually low, as measurements already done by AQCC and the Sharif University of Technology clearly show.

However, to overcome all these difficulties VERT® member companies have usually the right technology.

**Exhaust temperature (°C)
Mercedes OM457 Engine**



AQCC monitoring stations



The city owned **AQCC**, the **Sharif University of Technology** and the **Tehran City Bus Company** as well as the **VERT® association** work perfectly together. Monitoring stations all over Tehran are there to verify and document the effects of the **DPF retrofits**.

