

Acquisition of rolling stock Wieslaufalbahn

Consulting of the "Zweckverband" for the planned renewal of its Diesel fleet, on the non-electrified line of Wieslaufalbahn.

Vehicle technology/Feasibility

Client:
Zweckverband Verkehrsverband Wieslaufalbahn (ZVWV)

End: 2015

In 2012, TTK was entrusted for a feasibility study about the electrification on the line of Wieslaufalbahn. Subsequently, TTK became in charge to support ZVWV for the rolling stock acquisition.

Targets are new or modern second-hand vehicles, equipped with Diesel motors. In parallel the application with other mode of propulsion should be studied. Among the terms and conditions, reliable acquisition and maintenance, a high comfort level and an easy accessibility.

First steps were to become aware of the existing infrastructure, of the used rolling stock specifics and to analyse the operation mode of the vehicles therewith to define the different expectations of the transport system.

Subsequently, TTK started discussions with all famous constructors. The different propulsion modes (in particular vehicles equipped by rechargeable batteries by several systems) were analyzed and evaluated according to defined criteria.

Besides prospecting for new vehicles, TTK checked the availability of second-hand vehicles and considered the option of leasing vehicles.

The final result was an evaluation of the reliability of each option proposed by TTK and a recommendation to the "Zweckverband".

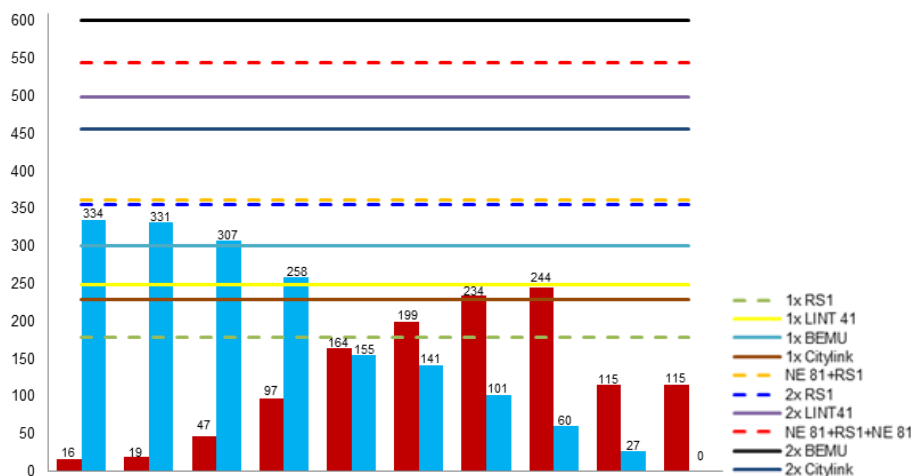
In the future, TTK will stay on next to the Zweckverband for answering questions and conducting investigations on this subject.



RS1 and NE 81 at the station Rudersberg

Bereich	Kriterium	Gew.	Variante 1.1	Variante 1.2	Variante 2.1	Variante 2.2	Variante 3	Optimales Fahrzeug
Wirtschaftlichkeit	Investition Fahrzeuge	60 %	150	120	60	30	60	150
	Investition Infrastruktur		80	80	40	40	60	100
	Kosten		10	20	40	30	20	50
Technik	Barrierefreiheit	20 %	16	32	40	40	32	40
	Umwelt		5	10	15	10	20	25
	Komfort		7	14	28	28	21	35
Perspektive	Risiko	20 %	16	16	40	32	8	40
	Verfügbarkeit		10	10	25	25	5	25
	Zukunftsfähigkeit		7	7	28	28	21	35
Ergebnis			301	309	316	263	247	500

Results of the scoring model



Comparison of the amount of passengers and of the capacity of the different types and combinations of vehicles