

2022/2023	Hungary		Austria		Croatia		Germany	
	Service name	Calculation method	Service name	Calculation method	Service name	Calculation method	Service name	Calculation method
Basic services	Ensuring of train path	(charge+mark-up)*train km	Minimum access package	train km and gross tonne km component: (charge+mark-up)*train km (charge+mark-up)*gross tonne km	Minimum access package	freight trains: $C = \sum [TR_i * L_i * C_{min} * (l_{tr} * C_{tr})] * S$ passenger and loco trains: $C = (T + d_n) * S * L * C_{min} * (l_{tr} * C_{tr})$  $C =$ Minimum access package charge $TR_i =$ weight category of train path in freight transport $T =$ train path equivalent $d_n =$ additional charge for the use of tilting technique $L =$ line parameter $l =$ train path length (km) $C_{min} =$ basic price (passenger trains, freight trains) $l_{tr} =$ length of train path with electric traction (km) $C_{tr} =$ additional charge on trainkm price for the train path with electric traction $S =$ coefficient for the single wagon load train	Minimum access package	Train path charge = Echarge for minimum access package (for segments) * train path kilometres  Minimum access package = $uKZ + VKA +/- wE$ (fee for segments + mark-ups +/- other)  $uKZ =$ direct costs of train operation per market segment $VKA =$ surcharge to cover the full costs $wE =$ possible additional elements
	Running of train (train km)	(charge+mark-up)*train km		Track access charges = train km component per market segment + gross tonne km component per market segment +/- reductions/supplements				
	Running of train (gross tonne)	(charge+mark-up)*gross weight*km		Reductions/supplements : - Traction unit factor - Supplement for congested rail infrastructure - Performance Regime (punctuality)				
	Use of catenary system	(charge+mark-up)*km						

2022/2023	Italy		Romania		Slovakia		Slovenia	
	Service name	Calculation method	Service name	Calculation method	Service name	Calculation method	Service name	Calculation method
Basic services	Minimum access package	Access Charge = A (wear and tear component) + B (markets segments' ability to pay component)  $A =$ (unit fee of weight classes + operating speed classes + overhead contact line)*km $B =$ unit fee per market segment*km	Minimum access package	IAC IAC = $\sum$ IAC section IAC section = IAC tannage + IAC circulation+ IAC electrification  Tonnage IAC = $Km * Ttsn [1+ (Gross tonnage - Tmin) * Ft]$  Traffic IAC = $Km * (Tc + Ttse)$  where: Ttsn – charge depending on the tonnage for each category of non-electrified sections Tmin – gross tonnage starting from which the tonnage factor is applied Ft – tonnage factor (correction coefficient to be applied to the gross train tonnage) Tc – traffic charge depending on the distance for each section category Ttse – applied for the line sections equipped with electrification systems only for trains with electric traction	Minimum access package	Ump=U1+U2+U3+U4 (Maximum charges of minimum access package) in 5 line categories  U1 = Maximum charge for ensuring of train path (€/vkm) U2 = Maximum charge for traffic control and management (€/vkm) U3 = Maximum charge for infrastructure capacity (€/1000 gtkm) U4 = Maximum charge for use of catenary system (€/1000 gtkm)	Minimum access package	(5.2) Total access charge (U) is determined by the following formula: $U = U_p - U_s + U_m + U_d$ where: U – Access charge total U <sub>p</sub> – Access charge calculated under service packages P1, P2, P3 and P4 U <sub>s</sub> – Incentives U <sub>m</sub> – Mark-ups U <sub>d</sub> – Duties
	Border sections and connecting stations with Foreign Networks	access charge to network connecting stations (fix fee for trains) + usage charge* trainkm at border sections						$UP1 = CP1 + \sum (KMi + PPI + Pti + Pli)$
	Connecting Stations with the Regional Network	fix fee for usage of stations for trains, without purchasing a path						UP1 – Access charge for carried out train path CP1 – Basic fixed access charge under Package 1 /CP21= EUR 2,01 KMi – Number of train km on a homogeneous line section (l) PPI – Route coefficient on a homogeneous line section (l) Pti – Train coefficient on a homogeneous line section (l) Pli – Tractive vehicle coefficient on a homogeneous line section (l)