

# *Restructuration of Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC) on PT. Kereta Api Indonesia (Persero) Based on Justice*

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**Abstract-** The conception of welfare state places public service as state responsibility to run it optimally for the welfare of its people. Public service in the welfare state conception is the responsibility of the state, including the public transport of railways which is managed by PT Kereta Api Indonesia (Persero) as a State's Owned Enterprise. The arrangement of PT. Kereta Api Indonesia (Persero) Track Access Charge has been established. However, the schemes of Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC) which stipulate that the amount of TAC is 75% of IMO or even only based on the funds available in the state budget are only oriented to the open competition in the business activities of the railway company and heavily influenced by political and economic interests, therefore it is not coherent with the principle of justice in the concept of welfare state. The implementation of TAC policy currently only functions as the balancing factor between the PSO and IMO calculations, thus it seems like a policy instrument used by The Ministry of Transport to attain non-tax revenue (PNBP).

**Keywords-** *Restructuration, Track Access Charge, PT Kereta Api Indonesia (Persero), Justice.*

## I. INTRODUCTION

Regulation of the President of the Republic of Indonesia Number 53 of 2012 stipulates, among others, that the national railway financing policy, set forth in the Public Service Obligation and Railway Transportation Subsidy (PSO), State Railway Infrastructure Utilization Costs (TAC), and Infrastructure Maintenance and Operation Costs of State Owned Railway (IMO).

Regulations on PSO, IMO and TAC in Indonesia in general have not indicated proportional tendency to the aspects of social, economy, politic, culture, and institutionalization in determining public service management strategies, thus leading to conflict of interest. Conflicts of interest severely restrict the pattern of railway operations. The conflicts limit the arrangements of railway operations which impact on railway operations and result in the decreasing quality of railway infrastructure and facilities. This also disrupt the on time performance in train operations and causes delays in departure and arrival of trains, and even potentially leads to railway operational disturbance.

Regulation of the Minister of Transportation of the Republic of Indonesia No. 62 of 2013 on Guidelines for Calculating the Costs of using State-Owned Railways Infrastructure stipulates that the cost of Track Access Charge (TAC) is the cost to be paid by the operator of the railway facilities for the use of railway infrastructure managed by the railway infrastructure regulator.

In the implementation, the schemes of PSO, IMO and TAC have not been based on justice principles, for example, PSO, IMO and TAC payments are not yet accountable in accordance with the applied laws and regulations. There is no equality and fairness among of parties in the implementation of PSO, IMO and TAC contracts according to the legislation. The position of the Ministry of Transportation as both regulator and auditor has a higher position in the implementation of the agreement than PT Kereta Api Indonesia (Persero) as the operator

The problems experienced by rail transport in Indonesia related to TAC have been experienced by rail transport providers in Europe since two decades ago. Rail transport in Europe has been developed and coordinated well among its countries. In Europe, there has been a separation of responsibilities between the infrastructure manager (IMO) and the operational operators (TAC) so that the financing schemes for infrastructure are clear, and result in a clearer TAC scheme.”

Track Access Charge of *PT. Kereta Api Indonesia (Persero)* has not been stipulated fairly as demonstrated by the fact that since 1990 during the transformation of railway company status from *Perusahaan Jawatan Kereta Api (PJKA)* into *Perusahaan Umum Kereta Api (PERUMKA)*, the scheme of State Railway Infrastructure Utilization Cost (TAC) was equal to the Maintenance and Operation Costs of the State Owned Railway Infrastructure (IMO). Such conditions resulted in increased accidents in the railway operations such as the collision of *Empu Jaya* train from Jakarta route with *Gaya Baru* Night Train from Jakarta-Surabaya route which stopped at Ketanggungan Station, Brebes, Central Java, on Tuesday, December 25, 2010 at around 04:20 pm. The

accident killed 41 passengers and dozens of others were seriously and lightly injured [1].

The arrangements of *PT. Kereta Api Indonesia (Persero)* Track Access Charge (TAC) scheme have not been implemented based on justice. The enforcement of TAC by the Ministry of Transportation has been indicated to meet the target of Non-Tax State Revenue (PNBP) which is charged to its directorate. In addition to the TAC, the revenue of the Directorate General of Railways to Non-Tax State Revenue (PNBP) is derived from the cost of railway facility crew certification, the cost of the Railway Travel Controller certification, and the calibration cost of the railway testing equipment. If the arrangements of the scheme are not restructured, it will be difficult for rail transport mode to compete with other modes of transportation, because other modes of transportation, such as private vehicles, do not have to pay the cost of using road infrastructure. Conversely, trains that are supposed to be mass transports are actually burdened with the high cost of using rail infrastructure

**II. RESEARCH METHOD**

This research is a normative legal research on the Restructuration of *PT. Kereta Api Indonesia (Persero)*'s Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC) based on Justice. This research applied statute approach, conceptual approach, and case approach. The normative approach is used to identify the foundation of legislation and ontology ratios for the formation of laws related to the research problems. By studying the legislative foundation and ontology foundation of a particular law, it is expected that the philosophical value underlying law can be identified.

**III. FINDINGS AND DISCUSSION**

*1. Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC)*

The indicators of Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC) policy implementation which is not based on justice include: 1) the funding on PSO, IMO and TAC mechanisms to date is only based on the available funds in the state budget; 2) Track Access Charge (TAC) mechanism = 75% of Infrastructure Maintenance and Operation (IMO) in net; 3) *PT Kereta Api Indonesia (Persero)* bears the Infrastructure Maintenance and Operation (IMO) funds which is more than the available funds in the state budget

**TABLE 1 COMPONENTS OF TRAIN TICKET FARES**

TRAIN TICKETS TRAFFIC COMPONENTS	
A	CAPITAL
B	OPERATION COSTS
	1. Fixed Direct Cost
	a. Cost of Crew Staff of Railway Facility
	b. Charge Infrastructure Utilization Cost
	c. Insurance
	2 Not-fixed Direct Cost
	3 Fixed Indirect Cost
	4 Not-fixed Direct Cost
C	Fees of Facility Maintenance
D	Profits

TAC currently tends to be the balancing factor of the PSO calculation, IMO, not as a policy instrument for the Government. Despite the reduction in Budget Implementation List (DIPA) in National Budget (APBNP), PT KAI continues to maintain infrastructure based on the safety standards. This condition would have an impact on PT KAI's finances so that PT KAI can not invest on railway infrastructure. IMO Funding on State Property is derived from Railway Revenue from freight rates in the form of passenger train tickets. One of the Tariffs of Railway Transportation is the Cost of KA Infrastructure Utilization. Therefore, the greater the cost of IMO, the greater the cost component of the use of KA Infrastructure (TAC), so that the railway tariff will be higher and become less competitive which eventually burden the society who are using the rail transport service and their welfare in a more-broader sense.

Since 1990 PT KAI is burdened with TAC which its amount is equal to IMO [2]. According to Minister Regulation PM. 62 of 2013 on Guidelines on the Use of Railway Infrastructure Utilization Amount (TAC) is 75% of IMO. TAC began to be paid by PT KAI to the government since 2014 amounting to Rp 1,003,000,000 and in 2015 the amount of paid TAC was Rp 790,000,000 Such conditions resulted in a number of accidents in the train operation conducted by PT KAI which is still relatively high compared to railway companies in Europe as well as in Asia.

**TABLE 2 CALCULATION OF TAC TO IMO**

TAHUN ANGGARAN	NILAI KONTRAK IMO	IMO TANPA PPN	PNBP TAC
2015	1.471.843.612.000	1.338.039.647.274	1.003.665.991.783
2016	1.142.816.666.000	1.038.924.241.819	779.371.031.733
2017	1.230.065.002.000	1.118.240.910.910	838.858.533.547
2018	1.325.000.000.000	1.204.545.454.546	903.409.090.905

Source: interview result with data of PT KAI Track Access Charge manager

As a result of infrastructure maintenance carried out independently by Perumka and PT KAI from 1990 until 2014, there was a backlog of infrastructure maintenance. Such conditions resulted in increased accidents in the railway operations such as the collision of *Empu Jaya* train from Jakarta route with *Gaya Baru* Night Train from Jakarta-Surabaya route which stopped at Ketanggungan Station, Brebes, Central Java, on Tuesday, December 25, 2010 at around 04:20 pm. The accident killed 41 passengers and dozens of others were seriously and lightly injured [1].

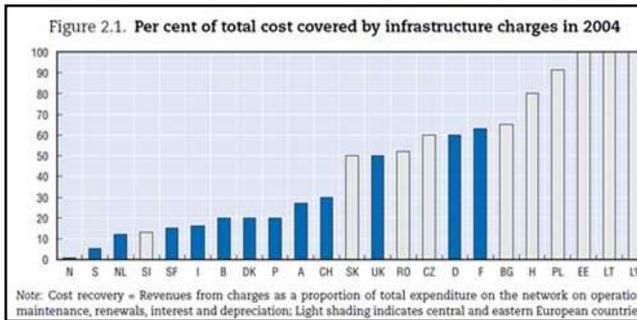


Fig. 1 Comparison of TAC In European Countries EUROPE

According to the data above, TAC to IMO scheme in European railways is lower than the TAC to IMO scheme of PT KAI. The government as the railway regulator must set priority on the Social Justice principle. The regulations on the obligations of rail infrastructure usage or TAC charged to PT KAI by the state should be based on social justice principle. The effectiveness of PT KAI TAC is very influential to railway transportation mode users. The imposition of TAC should not be solely determined by the technical aspects of obtaining non-tax state revenue but should also consider the aspect of social justice for the railway transport user community.

According to Ostrom, common pool resources have two main characteristics. First, it has the nature of subtractibility or rivalness in its utilization. The overuse tendency can cause congestion that occurs due to imbalance between supply and demand at certain times. Secondly, there is a cost that must be spent to limit the access of resources to other parties that become beneficiaries. The problem that arises is the presence of free riders, namely the existence of the parties who get benefits but not contribute to the costs that must be spent to provide, maintain and manage resource utilization. The trend of free riders that exceed the limit will threaten the sustainability of the production system [5].

The Constitutional Court mentions five forms of state control, namely policy making (*beleid*), *bestuursdaad*, *regelendaad*, management (*beheersdaad*), and supervision (*toezichthoudensdaad*). And the attainment of the greatest goal of the people's prosperity is formulated into four benchmarks, namely (1) the level of equity of natural resources for the people, (2) the level of equitable distribution of natural resources to the people (3) the level of equity of people's participation in determining the benefits of natural resources, and (4) respect for the rights

of the people inherited in the utilization of natural resources [6].

The Restructuring of Track Access Charge of *PT. Kereta Api Indonesia (Persero)* will always be related to Infrastructure Maintenance and Operation (IMO). In principle, Government as the regulator when formulating the schemes of TAC and IMO must take into consideration the following principles of law: good will; equilibrium; appropriateness; certainty of law; and welfare [7].

The fact (*das sein*) derived from the study shows that; the basic arrangements of the IMO scheme to TAC have not been based on justice. Arrangements of the TAC scheme to IMO in rail transport modes precisely burdened ticket prices to be costly, resulting in a burden to the society. When compared with the European TAC railway policy, in which IMO is lower than the Indonesian railway scheme, the public service of European railway services is more prosperous for the people. The government as a state ruler which consists of political elites, either legislative, judicative or executives must morally support the change on schemes of the TAC in relation to IMO to realize the good, transparent and peaceful society life in the welfare state. If the government's policy to restructure TAC to IMO can be improved, then the purpose of the welfare state will be realized.

2. Arrangements of *PT. Kereta Api Indonesia (Persero)* Track Access Charge which have not been based on Justice.

One of the laws governing the TAC is The Government Regulation No. 15 of 2016 on Types and Tariffs of Non-Tax State Revenue Applicable to the Ministry of Transportation, and its implementation are regulated in the Minister of Transportation Regulation No. PM.122 of 2015 on Amendment to the Regulation of the Minister of Transportation Number PM.62 Year 2013 on Guidelines for the Calculation of Railway Infrastructure Utilization Costs (TAC) which is set at 75% X IMO.

According to Adrian Yudistiara, the train operator, PT KAI, should not be burdened with TAC. Even if there must be TAC, the amount should be smaller than the cost of IMO. On these matter, Joko Setiowarno argued that the government should reduce the TAC. If the TAC burden is only 10 percent of revenues and profits, he said, he does not object. Other expenses incurred by PT KAI are Infrastructure Maintenance Operation (IMO) aka maintenance facilities. In fact, it should be, the maintenance of Infrastructure should be the responsibility of the government. This is because it involves the whole society. Trains are mass transportation, thus, this is a public service. Due to the public service, it is appropriate that the maintenance also gets more attention from the

government. In fact, it is better for the government to be responsible for this.

It has been mentioned in the background that the problems experienced by rail transport in Indonesia related to TAC have been experienced by rail transport operators in Europe since two decades ago. As an illustration, here are the views of TAC practitioners in Europe, the problem solving related to TAC in Europe, among others [2]:

- a. Markus Giger (Switzerland), Head of the Federal Transport Office, Railway Network Section, Switzerland, introduced the first rail infrastructure fee (TAC) cost scheme in 1999. This Swiss TAC scheme included the weight factor of the train and not just the railway line. However, the scheme put forward by Mark Giger has been criticized for being too simple and the scheme has been reviewed. The scheme is more different but still quite simple and changes the passenger and freight parts of the total cost.
- b. Jochen Holzfeind, Head of Asset Management Line - SBB Infrastructure (Schweizerische Bundes Bahnen - Swiss Railway). The SBB rail network is one of the most widely used in the world. Over the past two decades, SBB Infrastructure has increased its carrying capacity (in tons of kilometers) by 70%, network usage (number of train / platform length) by nearly 40% and demand (passengers per day) by almost 50%. The assets require adequate maintenance in accordance with the evolving requirements. The provision of budget in maintenance has lasting and far-reaching consequences for the entire rail system. The success of SBB in the long term shows that it is important to have a healthy rail network that meets the needs of the customers.
- c. Stefan Schenk, Head of Contract & Sales Track – SBB Swiss. The wear and tear factor, developed by the SBB Track Asset Management team, was implemented as a new price element in the Swiss railway pricing system in January 2017. With this change from gross loading per ton of trains to vehicle-specific prices, multiple data sources are required to calculate the price factor and weariness factor.
- d. Richard Schneider, Vice President of R & D - Bombardier Transportation, described that a vehicle development area with a positive effect on track access costs is identified as: a. Shaft guidance systems such as FLEXX Tronic ARS or HALL, b. Axle stiffness, c. Wheelbase, d. The concept of mass and drive without suspension, e. Traction power installed, f. The mass of the vehicle. A closer look at the results of different systems allows for the following conclusions: 1). The highest cost savings can be achieved with a wheel guide system that provides the lowest and most effective rigidity of the wheel set, such as the FLEXX Tronic ARS, 2). With a passive system like HALL, max. The possibility of a reduction in the dependency factor is expected to end at around 15%. 3). The further contributors are the rigidity of the pivot guides, the mass that is not suspended and the wheel spacing by about 2 - 5% 4). Unscheduled mass provides a six-fold higher reduction as an equivalent of mass reduction in the suspended portion of the vehicle. 5). Switchable dampers, installed power and weight of the vehicle itself provide potential savings below about 2%. The new Swiss TAC model burden is considered the only valid tool to change the negative trend in the cost of track maintenance and to restart the development of rolling stock-friendly tracks.
- e. Juan Melendez, Director of the Transportation and Energy Division CEIT, put forward the need for a cost modeling methodology developed in the Horizon 2020 lighthouse project in order to be valid and widely accepted across Europe to reflect and measure the global impact of performance across the railway system. Furthermore, the quantification model of universal cost is very important to orient the work to be done in SHIFT2RAIL (eg mechatronics, new materials, wireless sensors) to measure the value of the results and finally to ensure the uptake of the newly developed technology market.
- f. Frank Jost, Policy Officer-European Commission, Infrastructure managers in the EU, had been obliged to set infrastructure costs at the expense directly incurred by rail services. It has been stipulated the main arrangements of the EU implementing regulations on modalities to calculate such costs. Marking is only permitted if the market segment that can pay its direct costs is not excluded from the use of the infrastructure.
- g. Miguel Amaral, Head of Railway Regulatory Management Unit – ARAFER, stated that one of the main imposing principles laid down in the 2012/34 / EU directive states that "access costs" should be set at the costs directly incurring as a result of rail operations. Modality for direct cost calculation has been set by 2015/909 rules adopted on June 12, 2015.
- h. Justina Hudenko, CFO–Latrailnet, Rearrangement of the TAC's charging rules in the Baltic State, where due to favorable geographic positions, full cost applications without centralization are possible. Differences in the organization of passenger and freight transport will affect the calculation of direct costs on all steps required by the EC implementation actions such as costs and requirements of railway infrastructure development, as well as costs associated with predicted and irreversible environmental impacts and operating conditions in the short term. Deviations from predicted traffic volumes can significantly impact the outcome of infrastructure operations. Econometric expertise should be implemented for

each of the infrastructure operational areas separately. In addition to different network comparisons, the following parameters should be considered: purchasing power parity, permissible axle loading, train length, gauges, speed, timing scheduling, electrification and signal types.

- i. Wolfram Merzyn, Senior project manager of track system development - DB Netz AG, argued that due to changes in the European framework, it is important for DB Netz to customize TAC. In this way, legal compliance must be ensured on an ongoing basis.
3. *Conflict of Interests due to the Implementation of Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC) which has not been based on Justice Principles*

The arrangements of Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC) on *PT. Kereta Api Indonesia (Persero)* have not been implemented based on justice and result in conflict of interests. Conflicts of interests severely restrict the pattern of railway operations. Conflicts severely limit the arrangements of railway operations which impact on railway operations, result in the decreasing quality of railway infrastructure and facilities, and disrupt the ontime performance of train operations in the form of delays in departure and arrival of trains, and even potentially cause railway operational disturbances.

The state still seems hesitant to implement the instruments of legislation that have been made by itself, resulting in miscommunication and disharmony between PT KAI as the railway operator with the Directorate General of Railways at the Ministry of Transportation on behalf of the government as the regulator, resulting in blame and throwing responsibility between the government as the regulator and operator. In joint decree SKB 3 DIRJEN No. SK. 95/HK.101/DRJD/1999, No. KEP-37/A/1999 and No. 3998 / D.VI / 06/1999, railway financing is regulated through the schemes of PSO (Public Service Obligation) funding, IMO (Infrastructure, Maintenance and Operation) and TAC (Track Access Charge).

The agreed schemes have not been not fully implemented. The obstacle faced in implementing the PSO is the limited state financing (although in the drafting of the joint decree, it has been mentioned that the implementation of the PSO, IMO and TAC schemes is adjustable to the state's financial capacity). Because of this constraint, the problem faced is the absence of funds to implement the IMO. The absence of government funding for the maintenance and operation of railway infrastructure owned by the government certainly has a significant impact on the declining performance of railway transport services.

#### IV. CONCLUSION

The arrangement of PT. Kereta Api Indonesia (Persero) Track Access Charge has been established. However, the schemes of Public Service Obligation (PSO), Infrastructure Maintenance and Operation (IMO), Track Access Charge (TAC) which stipulate that the amount of TAC is 75% of IMO are only oriented to the open competition in the business activities of the railway company which are heavily influenced by economic interests, therefore it is not coherent with the principle of justice in the concept of welfare state. Thus, restructuring in Track Access Charges policy needs to be performed, as mentioned by the railway experts in Europe. The implementation of TAC policy currently only functions as the balancing factor between the PSO and IMO calculations and not as a policy instrument of welfare state for the Government and thus burdens PT Kereta Api Indonesia (Persero) with cost of money due to the requirement to pay for IMO. The Restructuring of PT. Kereta Api Indonesia (Persero) Track Access Charge in relation to Infrastructure Maintenance and Operation (IMO) based on justice will be realized if it considers the following principles of law: good will; equilibrium; appropriateness; certainty of law; and welfare.

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