

Proposal for revision of draft Guidelines on ITC mechanism

The compensation mechanism among TSOs was developed in 2002 as a result of the Florence forum, and has been refined since that time. The idea behind the mechanism was the European grid as a „copper plate“ which allows to effectively use the transmission grid for electricity transport contributing via cross-border trade to competition on national or regional markets and integration towards IEM. Removal of distance-related tariffs was one of the tools for integrating markets. In the meshed European grid, it is difficult to trace the transaction path, so the only way is to establish „post stamp“-based tariffs for accessing the grid. To promote cross-border trade as a main source of competition, it was decided that tariffs be not paid directly by those agents which use the grid (exporters and importers) , but by national networks and in consequence by national tariff payers (consumers or generators).

This decision led to the situation where national tariff payers are forced to pay not only for costs they induced, but also for the costs induced by other agents. In a case of L component, consumers are “subsidying” exporters what obviously, is not acceptable. But even when G component is introduced still some non-exporting producers are forced to subsidize their exporting competitors which for sure is not fair. There is a similar situation on the consumer side. In the same way, consumers and generators are forced to pay for consequences of the decision taken by the trader. Due to market characteristics, it is possible that traders benefit most from cross-border trade while consumers and generators pay for the resulting costs. If this is politically acceptable as a tool to support market development, it must be ensured that costs/compensations to be paid are determined in a fair manner and that no inappropriate cross-subsidies are created leading to inappropriate financial transfers between the countries. Appropriateness should be evaluated:

- a) with respect to the original idea of compensation of costs induced by cross-border trade (so the principle of avoided costs should be taken into account and compensations should be in proportion to the additional costs of the grid related to increased cross-border flows)
- b) with respect to fair distribution among contributing countries and compensated countries. In a meshed grid, it is difficult to determine the effects of individual cross border transactions as all transactions, internal and external, affect the use of the grid at the same time. In the light of the original „copper plate“ idea, a relatively high degree of solidarity among participants in sharing costs is necessary, and any move to costing individual transactions (which means also pair transactions between exporting and importing countries) should be very carefully checked in terms of its final effects on contribution and compensations.

The new method proposed in the draft Guidelines (called sometimes IMICA) retains the main idea of the current method which is Transit key as a mathematical construction for the definition of the compensation level as a share of the total grid costs and distribution of total costs among the participating countries. This method, though mathematically more complicated than currently used, still maintains a high level of simplification, which significantly distorts the resulting financial transfers. As compared to the current ITC mechanism, it entails some improvement on the one hand, but at the same time it leads to side effects and distortions which were not at the same level before. As a whole, this method is almost as far from an appropriate and fair determination of costs and their distribution as the previous one. For that reason, it was rejected by the Czech representative.

If there is a strong political will to change the mechanism and to use at least temporarily an improved „transit-key“-based mechanism, some adjustments in the proposed mechanism are absolutely necessary in order to minimize extreme distortions of this method, which could be detrimental to citizens of several EU Member States.

We have indicated three areas of distortions, and developed revisions in the proposed guidelines with a view to removing these distortions:

- 1) **Use weekly snapshots and ex-post calculation of sensitivity factors:** The new method provides extreme instability of results. Simulation and analyses performed to date have proven that calculation results were extremely dependent on the snapshot used. As a result, the contribution of one country with the same export or import in two hours/snapshots can differ 9 times or even more depending on the export/import situations in other countries. It is hard to believe that the same export induces so different costs in the grid within two hours of the same day. This is one of the major flaws of the method; thus, the cost reflectivity of this mechanism is put into doubt. An important problem is also the “ex-ante” determination of sensitivity factors. These factors are crucial for the determination of payments, and calculated “ex-ante” means that monthly payments in the year Y are determined by the network situation two years before, which can significantly differ. As a result, the payment for some countries (and revenue for others) can be many times higher during the same month than is appropriate for the real situations in the network, all which is not acceptable. To remove these extremes, two adjustments are necessary :
 - a. “ex-post” calculations should be used – because for treatment of losses, all snapshots will be collected anyway (according to the draft guidelines); the calculation of sensitivity factors should be based on these data reflecting the real situation in network use;
 - b. a sufficient number of snapshots should be used – sensitivity factors are critical for the results, as the network situation is changing mainly in a weekly cycle (grid and generation maintenance, generation and load patterns); it requires snapshots to be used for each week of the year; otherwise, data used from a non-typical week for the whole month could significantly distort payments. 6 snapshots are necessary for each week.Using less snapshots and “ex ante” calculations is contradictory to Regulation 1228 as in most of the hours the compensation is not paid in proportion to the real flow but to the key which does not reflect the real flows and costs induced.
- 2) **Use positive sensitivity factors for determination of compensations instead of net factors:** Net sensitivity factors are a mathematical construction which is not appropriate to be used for determination of costs. Using net factors leads to the conclusion that counter flows relieving (in given hours) the natural flows benefit the hosting TSO. It is nonsensical in economic terms as the network has already been constructed and has had to be paid. It is a widely known fact that the network is constructed to cope with the highest load situations and not with average load. Thus, a relieve in network use cannot bring any benefit unless guaranteed for all hours. The positive sensitivity factor reflects this fact and while on the one hand it accounts for network use (and costs) of the element on which cross-border flows increase the use of the grid, it does not allocate negative costs **on the element** on which cross border flows relieve natural flows. Using net sensitivity factors is in

contradiction to Regulation 1228 due to accounting for non-existing benefits and damaging some network users in favor of others. **Positive factors have to be applied exclusively on the grid element level as any aggregation (based e.g. on asset class or country level) inevitably leads to inappropriate accounting which results in non-justified benefits.**

- 3) **Use loop-flow factor to take account of real cross-border flows instead of only commercial transit flows.** Regulation 1228 has based the compensation mechanism on **cross-border flows**. During discussions and the preparatory phase of Regulation 1228 it was repeatedly considered whether to use transit flows or cross-border flows. At last, the Parliament voted for cross-border flows in the final version. Even the current ETSO method is not purely in line with that, as it takes only account of real transits (including parallel and loop flows but not export and import flows). But the new method is even far from the Regulation requirement taking only account of commercial transit flows as a result of reference exchanges. Apart from the fact that reference exchanges are a significant simplification of real flows which can distort the results, they do not take account of loop flows, which are by definition cross-border flows and in some areas represent a major part of cross-border flows and network use. For countries hosting huge loop flows, the result of this will be that even if their grid is used by cross-border flows causing additional costs, and thus these countries should be compensated for that, the proposed ITC mechanism assigns only a small part of compensations (related to the portion of reference exchanges). As loop flows are increasing over time, this leaves some countries without major compensations required by Regulation 1228, which is unacceptable. In order to ensure that this is reflected in the ITC mechanism, we propose to incorporate a “Loop Flow Factor” which - based on the real flows documented by “ex post” snapshots - would adjust the transit key to reflect not only reference exchanges but also loop flows in the grid. This can remove one of the main distortions and moderate violation of the Regulation requirements.

The new method for an ITC mechanism proposed by draft guidelines could be acceptable for CEPS as a temporary solution only and with the changes proposed above which limit the effects of the major flaws of the method. We believe that other methods already worked out, such as WWT, better reflect the physical and economical reality of operating and using the transmission network and are more suitable to implement Regulation 1228. The new method (IMICA) has almost the same complexity of calculations and data handling as WWT or AP, but shows more drawbacks and distortions which have to be corrected in final results. The balance of positive and negative effects of the new method as compared to the current ETSO mechanism does not weigh in favor of this new method. If chosen as a temporary solution, it could be accepted for some period but only with the proposed adjustments until a method is implemented that is founded on a better technical and economic basis.

To achieve simplicity of the proposed method and avoidance of unreasonable payments, capping of the amount of receipts (compensations) and payments (contributions) shall be applied at least temporarily during first years of the implementation and development of the method. Contributions and compensations of individual countries shall be capped by uniform capping factor determined by ERGEG which allows only a limited increase/decrease of the respective values compared with the previous year. This approach ensures that gradual evolvement to the new method in the agreed direction will avoid extreme and abrupt impacts

and allows for further improvements of the method, also solving remaining drawbacks and flaws.