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## **Proposal of ERÚ for revision of draft Guidelines on ITC mechanism**

Compensation mechanism among TSOs was developed in 2002 as a result of Florence forum and evolved since that time. The idea behind the mechanism was the European grid as a „copper plate“ which allows to effectively use 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 grid.

To foster cross border trade as a main source of competition, it was decided, that tariffs will be paid not 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).

In effect this decision resulted in the situation, that national tariff payers are forced to pay not only for costs they induced, but also for the costs induced by other agents. In exporting countries, not only generators exporting, but also generators selling to their neighboring consumers are forced to „subsidized“generators exporting to other countries. Similar on consumer side. At the same way, consumers and generators are forced to pay consequences of the decision made by trader. It is possible due to market characteristics, that traders are those benefiting mostly from cross border trade while consumers and generators are those to pay resulted costs. If this is politically acceptable as a tool to support market development it must be carefully checked that costs/compensations to be paid are determined in a fair manner and not creating inappropriate cross subsidies of inappropriate financial transfers between countries. Appropriateness should be evaluated:

- a) with respect to the original idea of compensation of costs induced by cross border trade (so the avoided costs principle should be taken into account and compensations should be in proportions to the additional costs of the grid related to increased cross border flows)
- b) with respect to fair distribution among contributing counties and compensated countries – in meshed grid, it is difficult to determined effects of individual cross border transaction, all transactions internal and external affects the use of the grid at the same time. As the original „copper plate“ idea is present, 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 its final effects on contribution and compensations

New method proposed in Guidelines (called sometimes IMICA) keeps the main idea of the current method which is Transit key as a mathematical construction for definition of

compensation level as a share of total grid costs and distribution of total costs over participating countries. This method even if mathematically complicated than currently used still keeps high level of simplifications which significantly distorts the resulting financial transfers. Compare to current ITC mechanism it brings some improvement on the one hand but at the same time brings side effects and distortions which was not at the same level as before. As a whole, this method is almost as far from appropriate and fair determination of costs and its distribution as the previous one. For that reason it was voted against by Czech representative.

If there is a strong political will to change the mechanism and to use at least temporarily improved „transit key“ based mechanism, some adjustments in proposed mechanism is absolutely necessary in order to minimize extreme distortions of this method and can damage citizens of some member states of the EU.

We have indicated three areas of distortions and necessary revisions in the proposed guidelines to remove it :

- 1) **Use weekly snapshots and ex-post calculation of sensitivity factors:** new method provides extreme instability of results. Simulation and analyses performed up to date proved that results of calculation are extremely depending on snapshot used. As a result contribution of one country with the same export or import in two hours/snapshots can differ 9 times or even more depend on the export/import situations in other countries. It is hardly to believe, that the same export induces in two hours in the same day so different costs in the grid. It is one of the major flaws of the method, as the cost reflectivity of this mechanism is put into doubts. Important problem is also ex-ante determination of sensitivity factors. These factors are crucial for determination of payments, and calculated ex-ante means, those monthly payments in the year Y is determined by the network situation two years before which can significantly differ. As a result payment for some countries (and revenue for others) can be in some month many times higher, than is appropriate to the real situations in the network, which is not acceptable. To remove these extremes two adjustments are necessary :
  - a. ex-post calculations should be used – because for losses treatment, all snapshots will be collected anyway (according to the guidelines) the calculation of sensitivity factors should be based on these data reflecting real situation in network use
  - b. sufficient number of snapshots should be used – sensitivity factors are critical for results, as network situations is changing mainly in weekly cycle (grid and generation maintenance, generation and load patterns) it requires snapshots for each week in the year to be used , otherwise data used from not typical week for whole month could significantly distort payments . 6 snapshots for each week is necessary to use

If less snapshots and ex ante calculations are used, it results in contradiction with 1228 Reg. as the compensation is paid in most of the hours not in proportion to the real flow but to the key which doesn't reflect the real flows and costs induced

- 2) **Use positive sensitivity factors for determination of compensations instead of net factors:** net sensitivity factors are mathematical construction which is not appropriate to use for costs determination. Using net factors leads to the conclusion that counterflows relieving in given hours natural flows bring benefit to the hosting TSO. It is economically nonsense, as the network was already constructed and has

to be paid. It is widely known fact, that network is constructed to the high load situations and not to average load. Thus relieve in network use cannot bring any benefit unless guaranteed all hours. Positive sensitivity factor reflects this fact and while on the one hand accounts for network use (and costs) on element on which cross border flows increase use of the grid, doesn't allocate negative costs on element on which cross border flows relieve natural flows. Using net sensitivity factors is in contradiction to the 1228 Reg when accounting for no existing benefits and damaging some network users in favor of others

- 3) **Use loop flow factor to respect real cross border flows instead of only commercial transit flows.** Regulation 1228 base compensation mechanism on **cross border flows**. During discussions and preparation phase of 1228 Reg. it was repeatedly discussed whether to use transit flows or cross-border flows. Finally Parliament voted for cross border flows in the final version. Even current ETSO method is not purely in line accounting only for real transits (including parallel and loop flows but not export and import flows). But new method is even far from Regulation requirement accounting only for commercial transit flows as a result of reference exchange. Apart from the fact, that reference exchanges are significant simplification of real flows which can distort results, it doesn't take into account loop flows, which are by definition cross border flows and in some areas represents major part of cross border flows and network use. For those countries hosting huge loop flows, it results in the fact that even if their grid is used by cross border flows causing additional costs and thus these countries should be compensated; proposed ITC mechanism assigns only a small part of compensations (related to reference exchange portion). As loop flows are increasing over time, this leaves some counties without major compensations required by 1228 Reg which is unacceptable. In order to reflect this in ICT mechanism, we propose to incorporate Loop flow factor, which based on the real flows documented by ex post snapshots adjust transit key to reflect not only reference exchange but also lopp flows in the grid. This can remove one of the main distortion and kind of violation of the Regulation requirements.

New method for ITC mechanism proposed by draft guidelines are acceptable for Czech Republic as a temporary solution only with propose changes which limit effects of major flaws in the method. We believe that other methods already worked out such as WWT better reflect physical and economical reality of operating and using transmission network and are more suitable to implement 1228 Regulation. New method (IMICA) has almost the same complexity of calculations and data handling compare to the WWT or AP, but more drawbacks and distortions which have to be corrected in final results. Balance of positive and negative effects of the new method compare to current ETSO mechanism is not in favor of this method, and if chosen as a temporary solution only with proposed adjustment could be accepted for some years until better technically and economically based method would be implemented.