

PLENARY MEETING

**Document 91-E**  
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## **Report by the Council**

### **ADVANTAGES AND DISADVANTAGES OF UTILIZING REVENUE GENERATED FROM INTERNATIONAL NUMBERING RESOURCES FOR THE PURPOSE OF BALANCING REVENUE AND EXPENSES**

#### **Summary**

The draft financial plan noted by Council 2014 (see Document C14/92, Annex F, Table 1) calls for an increase in INR revenues of CHF 1'750'000 per year. Council 2014 requested that the Director of TSB forward a report to the final meeting of the Council on 18 October 2014 on the advantages and disadvantages of utilizing revenue generated from international numbering resources for the purpose of balancing revenue and expenses.

At its final meeting, the Council decided to forward this report to the Plenipotentiary Conference, together with a summary of discussions which can be found in Annex.

#### **Action required**

The Plenipotentiary Conference is invited to **discuss** the document and to **take actions** as appropriate.

#### **References**

[Resolution 91 \(Rev. Guadalajara, 2010\)](#); [Resolution 158 \(Rev. Guadalajara, 2010\)](#); Draft Financial Plan for 2016-2019;

[Document C14/INF/24](#) – Supplementary information on the advantages and disadvantages of utilizing revenue generated from international numbering resources for the purpose of balancing revenue and expenses

**Note:** in accordance with the decision of Council and the Terms of Reference of the Expert Group created in accordance with Council's decision, this Report takes account of the discussions in the Expert Group which held its final meeting on 22 August 2014.

Additional information on the work of the Expert Group, and additional information on the items addressed in this document, can be found in [Document C14/INF/24](#).

## **1 INRs allocated and assigned by ITU**

1.1 International Numbering Resources (INRs) refers to numbers, codes, and identifiers specified in ITU-T Recommendations. These numbers, codes and identifiers are indispensable to the operation of telecommunication networks and services. Most INRs are allocated free of charge. Some yield a small one-time cost recovery fee (maximum CHF 200) and a limited number now require ITU Sector Membership or an Associate membership in the relevant ITU-T Study Group. Annual cost for the administration of INRs is CHF 895'000/year and direct income is about CHF 200'000/year, meaning that costs exceed direct income from INRs by about CHF 700'000/year. The remainder of the cost is therefore covered by the general budget.

1.2 The number of assignments by TSB per year is very low for most INRs, and the total number of assignments by TSB is also rather low. This is due to the fact that the TSB mostly assigns codes to Member States, which then assign to operators, who then assign to users. Typically ITU only assigns one (or a few) codes per country. So after the establishment of the initial list of codes, most of the TSB administration activities related to these INRs are not assignment but publishing notifications (in particular national numbering plans, and International Signalling Point Codes (ISPC) and Mobile Network Code (MNC) assignments), changing country name, update of contact info, providing guidance and responding to queries. This ongoing administrative maintenance activity is essential to the operation of international telecommunications, and is thus of great commercial value. It does not appear practical therefore to obtain significant additional revenue by levying charges on direct assignments made by TSB. Revenue could be generated either by: (1) levying annual charges for certain INRs, at least to cover maintenance costs on assigned resources; (2) by levying annual charges on E.164 numbers; (3) by requiring that INR assignees be ITU members.

1.3 Some of the INR ranges that the ITU assigns directly can be assigned only to Recognized Operating Agencies (ROAs) (see Table A.1 of the Annex to C14/INF/24). But many Member States no longer use the concept of ROAs. In some Member States operating agencies are authorized under generic type-licenses or equivalent regulations. Section 5 of C14/INF/24 presents proposals for taking this into account. These proposals could be considered by the relevant ITU-T Study Groups together with other possible changes to the allocation criteria and new innovative services that could be offered by TSB.

## **2 Annual Fee for Certain INRs**

2.1 A new annual fee of CHF 20 for each assigned Universal International Freephone Number (UIFN) would result in an increase in revenues of about CHF 735'000 per year (assuming that no significant number of UIFNs will be returned after the annual fee is imposed). This would therefore provide full cost recovery for INR activities. This annual fee is modest compared to the CHF 200 registration/application cost and the commercial value of the resource.

2.2 The target of CHF 1'750'000/year in INR revenue foreseen in the draft Financial Plan would require a further increase of CHF 1'050'000 per year. This could be achieved by a new annual maintenance fee of CHF 100 for each assigned/registered/notified Issuer Identification Number (IIN), MNC, ISPC, and ITU Carrier Code (ICC). Each operator typically only has one of each of these INRs, so the annual maintenance fee would be very modest.

2.3 These annual fees would be paid by operators directly to ITU. The creation of these new fees could be decided by the Council, following which the relevant ITU-T Recommendations would need to be revised to reflect the Council's decision.

2.4 During discussions in the Expert Group, it was suggested that any new fees should be lower for ITU members than for non-members. If this approach is adopted, then a slightly more complex fee structure could be envisaged. Based on statistics that approximately 80% of UIFN are currently assigned to ITU members, while only approximately 20% of IIN, MNC, ISPC, and ICC are assigned to ITU members, an annual fee for UIFN of CHF 17/year for members, and CHF 35/year for non-members; and for the other resources CHF 50/year for members and CHF 113/year for non-members, would result in the same revenue.

### **3 Annual fee for E.164 numbers**

There are some 6 billion E.164 numbers in use. If an annual fee of USD 0.01 were levied per number, the total revenue would be some USD 60 million/year. Annual fees for E.164 resources assigned directly by the ITU would be paid by operators directly to ITU whilst for those assigned indirectly national administrations would need to be requested to levy the fees and pass on in part to ITU. The level of the fee would appear to be sufficiently low as not to result in many numbers being returned or in other negative effects.

### **4 Requiring INR assignees to become ITU members**

This would require that all assignees of INRs (which include E.164 numbers, MNCs and ISPCs) be members of ITU-T. Some 1,716 MNCs have been notified to ITU. Some operators have more than one MNC, so there are an estimated 1000 assignees. If all became ITU-T Sector Members, ITU's revenue would increase by some CHF 30 million per year, or CHF 10 million per year if they became Associates. The annual costs in question would appear to be reasonable in comparison with annual membership fees for other organizations.

### **5 Advantages and disadvantages of utilising revenue from INRs**

5.1 An advantage of generating revenue from INRs would be to improve the diversity of ITU income, and afford greater financial stability to the Union, as called for in Resolution 158. In addition, it would provide TSB the means to further enhance and modernize INR services, increase the resource available to address increasingly complex requests for shared E.164 and E.212 resources, and provide further support to bridging the standardization gap and other activities.

5.2 During discussions in the Expert Group, diverging views were expressed as to whether or not requiring that assignees be members would be an advantage or a disadvantage. One view is that it is not appropriate to force operators to become members, in particular because some countries do not charge for INRs. On the other hand many comparable entities only assign resources to members. An advantage of assignees being members is that they would then be well aware of changes in assignment policies and be able to influence them. Additionally, membership would provide a direct relationship between TSB and assignees, which would facilitate dialogue and support to ITU-T efforts in improving the service, including handling and/or mitigating misuse cases.

5.3 A fee structure that differentiates members from non-members has the disadvantage that it is harder to implement and administer, but the advantage is that it could increase the number of members.

5.4 In discussions in the Expert Group, it was stated that no new fees should be imposed by ITU on INRs that are allocated at the national level, because this would be a form of “double billing”. However, a contrary view is that assignees should contribute financially to the management of INRs, not just at the national level, but also at the international level. Comparable organizations do have schemes resulting in payments by assignees to both a central and a decentralized assignment authority, either directly, or indirectly in the sense that the decentralized authority pays fees to the central authority.

5.5 A further advantage is that the revenue from INRs would avoid having to reduce the ITU budget by some CHF 7 million for the financial period 2016-2019, resulting in some difficult decisions on where to cut, or other additional revenues would have to be found.

5.6 A consequence of raising revenue from INRs might be that assignees return resources that they currently hold, thus resulting in less revenue than initially foreseen. However the return of such resources would indicate that they were not being used efficiently, and so their return would be an advantage for those that are a scarce resource. The modalities for the collection of the fees need to be determined, as well as what actions would be taken in case of non-payment.

5.7 With respect to costs and benefits, it is estimated that the cost to ITU of implementing the proposed charges would not be significant. The additional revenue would create a new source of income for ITU, a source that is market-oriented in the sense that the revenue comes from industry stakeholders who generate profits (sometimes significant profits) by using these INR resources. As discussed in the Expert Group, the cost to industry would appear to be relatively minor compared to the value of INRs and the revenue derived from services that rely on INRs. The increased revenue could be used to improve the support offered to membership and the possible creation of innovative new services.

## **6 Practices of comparable organizations considered by the Expert Group**

6.1 Many comparable organizations charge annual maintenance fees, in addition to a one-time application or registration fee, and in many cases the fees are related to the number of assigned resources (either directly proportional, or on a decreasing per-unit basis) or they are related to the turnover of the assignee (the entity that obtains the resources). In several cases where the assignment scheme is hierarchical, a lower-level organization that assigns the resource to an end-user pays a fee to a higher-level organization that performs a global coordination function.

6.2 Some standards-making bodies outsource the administration of comparable resources, but most do not. However, outsourcing is not necessarily used as a method to lower costs for end-users: it can also be used as a method to generate revenues that are above costs and that are used to subsidize other activities, such as secretariats for standards-making bodies. For example, the Internet Society (ISOC) obtains revenue of around USD 24 million from the operation of the domain name “.org” and uses part of that (USD 5 million) to fund the secretariat of the Internet Engineering Task Force (IETF).

6.3 The World Intellectual Property Organization (WIPO) obtains revenues from certain services provided under its international registration systems, which represent over 90% of the Organization’s total income. The regular budget of WIPO finances activities targeting the

achievement of 38 Expected Results (2014/15 biennial Program and Budget), under nine Strategic Goals, and across 31 programs. Those revenues cover 94% of its budget and they are used to fund activities other than the services themselves. The total cost of the services provided for a fee is only about 40% of the total WIPO expenditure, so WIPO relies on these services to generate revenues well in excess of costs.

6.4 Within ITU, fees are charged for various activities, such as satellite filings, ITU Telecom events, and publications.

6.5 Satellite filing fees are based on cost recovery. The decision to limit revenues to the level required to recover costs was taken in consideration of the advantages and disadvantages of setting fees at a higher or lower level. That is, it was felt that the optimum was neither to subsidize satellite filings from the general ITU revenues, nor to use satellite filings in order to generate revenues in excess of costs.

6.6 In contrast, fees for both ITU Telecom and publications are not limited to cost recovery. On the contrary, both activities are expected to generate revenues in excess of costs.

ANNEX

## Summary of discussions at the final meeting of the 2014 Session of Council

The Deputy-Director of TSB introduced Document C14/111, on the advantages and disadvantages of utilizing revenue generated from international numbering resources (INRs) for the purpose of balancing revenue and expenses. The Council was invited to note the document and to take such action as it considered appropriate.

The following points were made:

1. Any fees charged should apply only to INRs assigned directly by ITU to operators, and should cover only the administrative costs concerned. Those INRs assigned by Member State administrations were often already subject to charges, therefore any risk of double charging should be avoided.
2. Those operators that were already ITU Sector Members should not have to pay fees for INRs. Non-Sector Members should be treated differently than Sector Members, especially in light of the efforts made to attract new members.
3. There were more advantages than disadvantages in charging for INRs. For that reason, and given the profits made by operators, the proposed approach to generating revenue was supported, and was also the basic approach adopted in other United Nations agencies.
4. ITU incurred expenses in assigning INRs, and the revenue gained by charging for the service could be used to support ITU's budget, or for the benefit of developing countries, for example.
5. Fees should not apply for resources not charged for previously.
6. There could be no certainty as to how much revenue might be generated, especially given the risk that the parties involved might seek other means of providing their services.
7. If administrations were asked to levy charges on behalf of ITU, it might lead to considerable complications at the administrative level.
8. The entire matter required further study.
9. A Council working group should study the matter and report to PP-18.
10. A full economic analysis should be carried out.
11. It would pose a moral dilemma to charge for a common or "natural" resource like numbering, and the assignment of INRs surely constituted one of ITU's basic activities.
12. INRs were an extremely valuable resource, which should be subject to charges.
13. Providers might find other ways of offering their services.
14. The approach could be detrimental to operators.
15. There should be no additional costs for administrations
16. The principle of cost recovery should be fully applied.
17. All revenues generated should be earmarked for specific purposes.

18. The approach was endorsed and took account of the views of all stakeholders.
  19. INR fees could be applied on a trial basis otherwise items in the strategic plan would have to be reviewed and possibly suppressed.
  20. This is an urgent and important subject which should be dealt with on a very high priority and ITU needs to move swiftly since it is related to the strategic plan and has financial impact on the plan and the balancing of the budget, it requires an urgent solution.
  21. The matter should be discussed in PP-14 so that all Member States could express a view.
  22. It was premature to forward the matter to PP-14.
  23. If the approach of charging INR fees was not adopted, there would be a deficit of CHF 5 million in the draft financial plan. It would be very difficult for the secretariat to find ways to make up that deficit.
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