



EXECUTIVE SUMMARY

**FINAL REPORT FOR THE POLISH MINISTRY OF FINANCE INFORMATION
TECHNOLOGY DEPARTMENT**

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I Executive Summary

1.1 Architecture

This document presents an overall software and hardware architecture designed, ultimately, to achieve the goal of a system of central processing for tax administration within the Ministry of Finance. The architecture presented is a "hybrid" in the sense that it centralizes some processing while leaving other processing in place at the Local Tax Offices (LTO). As was described in the Feasibility Study', the hybrid architecture is expensive from an operational point of view. As such, the hybrid is being proposed only as a transitional architecture to address functional deficiencies and to fill the gap between the local and central processing models. Since the hybrid architecture has all of the elements of a fully centralized architecture, it will facilitate the eventual transition to that model. Appendix A "Alternatives Analysis" reviews the alternative models available in more detail. It is important to note that the expense of the hybrid model must be considered alongside its benefits which will be described 'in this document.

1.2 Central vs. Hybrid Model

The term "central" architecture is defined to mean a pure central model, not a central model based on regions. There is no technical advantage to be gained from duplicating processing at the regional level. Vis-a-vis the current LTO-based model, a model centralized on regions would be an improvement, but one that would still involve significant opportunity cost (namely the lost opportunities associated with the cost advantages of the pure central model). If there is a political motivation for the regionally based model, the root cause of the motivation should be understood and addressed directly at that level. It is important to note that "central" does not necessarily mean physically located at the Ministry of Finance (NIOF), or even in Warsaw. Rather, the centralization of organizations and processing should occur wherever the greatest economic advantage can be gained. For example, the centralization of a data entry function might physically be located where there is an abundance of low-wage labor. This will be possible due to the location transparency that will be inherent in the new Wide Area Network (WAN).

For comparison with other countries, the central architecture described 'in tliis document is similar to that implemented in South Africa and Australia. The hybrid architecture described *in this document is similar to that implemented in the United States of America and formerly in Australia where a transition to a centralized system has been undertaken.

1.3 Phased Implementation

The architecture will allow a phased approach to the transition. The first phase will use data replication to give all levels of the MOF the ability to view accurate and timely data from a global or local perspective. This will lead to better identification and more accurate assessments of entities with tax liabilities, better Management Information Systems (MIS) and Decision Support Systems (DSS), and better taxpayer service. The lack of these capabilities in the current system represent a large opportunity cost in terms of the ability to identify and narrow the noncompliance rate which is difference between taxes owed and taxes actually declared and collected. This phase will require an increased investment and will cause higher operational costs since the current system of LTO-based processing will be retained (and possibly even expanded in some areas) while, at the same time, a system of central processing will be added. The costs might be somewhat offset by the ability to immediately consolidate some LTO functions associated with system administration. Implementation of the Hybrid model should not have any associated prerequisite legal changes.

The second phase, transitioning towards a centralized model, will involve technical as well as organizational consolidation that should dramatically decrease operational costs. This phase will be accomplished in the longer term since it requires legal as well as organizational changes. The architecture presented here enables the change to occur gradually at a rate determined by the MOR. As was pointed out in the Feasibility Study, implementing organizational consolidation along functional lines will allow the MOF to achieve economies of scale that are not possible with the current organization. Again, the consolidation will be made possible by the location transparency of the WAN. The technical consolidation of physical data processing equipment, databases, and technical staff will eliminate the massive redundancy that now exists in the LTOs. Legal changes may be required to either precede or coincide with this phase. More specific transitional issues are discussed in Appendix B "Transition Strategy". In order to *increase revenue and to increase the efficiency of the tax administration, it is important that the implementation of the hybrid model occur as soon as possible, and that the subsequent consolidation of organizations and processing occur expeditiously.

1.4 Document Organization

Section 2 provides an introduction that establishes the purpose and importance of architecture. The context of this Architecture is related to other 1-high-level system development documents in Section 3. General architectural concepts are described in Section 4. It proposes a layered and distributed software architecture that will provide the high level transaction throughput and performance that will be required to support the gradual centralization of processing. An initial

attempt to allocate processing to specific architectural components is provided. A system development strategy is described. Section 5 describes tax administration business areas in terms of any special software or hardware requirements, special network demands, and replication requirements. Section 6 contains the essence of the Systems Architecture document and characterizes Local Tax Offices (LTO) Regional Tax Offices (RTO) and the Ministry of Finance (MOF) in terms of their physical layout, their network topology (or layout), and an inventory of hardware and systems software. The general communication infrastructure is also described in terms of the WAN, throughput requirements, and administration of the network. Some general recommendations are made regarding the implementation of the architecture in Section 7 and a list of acronyms is included in Section 8. Appendix B entitled "Transition Strategy" describes technical and organizational steps to be taken to realize this architecture and Appendix A "Alternatives Analysis" describes the different models considered for POLTAX and the advantages and disadvantages of each to the MOF.

1.5 Recommendations

In order to 'increase revenue and to increase the efficiency of the tax administration, it is important that the implementation of the hybrid model occur as soon as possible, followed by transition to a pure central model. Integration with European Union. (ELD systems at the central level is another reason to effect this transition quickly. The architectural transition will stand a much greater chance of success if it can be formally tied to business goals and objectives documented in a Strategic Plan. Other factors that will influence the ultimate success are; the involvement of the user community for the entire duration of the transition, and the establishment of oversight mechanisms to ensure that standards are being adhered to, schedules are being met, functionality is being achieved, and budgets are not being overrun. Once these areas are addressed, this Architecture document will provide a solid technical basis on which to proceed.