Evaluation of the ICP 2005 Software Suite
Summary Findings and Results

Paper for Session 4

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Background

To assess the relevance and performance of the ICP Software suite tools used in the 2005 round and the adequacy of the documentation, training and support provided, the World Bank DECDG conducted an evaluation of this software suite.

The methodology for the evaluation included: (1) checking the relevance, operation, user-friendliness, and other features of the ICP 2005 Software suite; (2) evaluating the adequacy, clarity, and exhaustiveness of the supporting documentation; (3) preparing and sending questionnaires to obtain feedback from five regional coordinating agencies, one sub-regional coordinating agency, and fifty countries from four regions; (4) engaging in interviews with staff and consultants from the ICP Global Office and the Information Services and Systems Cluster involved in the development, testing, deployment, and use of the software suite; and (5) using additional sources of information that included software evaluations conducted by the ADB and the AfDB.

Summary findings and results of this evaluation exercise are presented below, along with its recommendations for software development and use in the 2011 round of the ICP.

Summary of findings from Regions’ responses

A questionnaire was prepared and sent to five regional coordinators from four regions: Asia, Africa, South America, and Western Asia. In addition, a sub-regional organization, ECOWAS, was also approached to provide its responses to the questionnaire.

The questionnaire included six sections that covered software use, installation, training, documentation, technical support, and use of alternative software. The results of the responses to this questionnaire are summarized in the graphs below (unless otherwise specified, figures in the charts indicate the number of answers under each category):
The regional coordinators provided many insightful comments and recommendations, including the following:

1. The software should require lower hardware and software requirements, and should be easy to install.
2. The software tools need to be flexible enough to allow regions to introduce modifications to the desired output.
3. Training courses should be provided by both an IT expert and an ICP expert/statistician.
4. Individual country training courses are more effective than joint training, because sometimes
country participants in the joint training are not the ones actually running the software.
5. All documentation need to be up-to-date and translated into official languages.
6. Technical support should be provided directly by the system developers.

Summary of findings from Countries’ responses

A second questionnaire was prepared and sent to fifty countries from four regions: Asia, Africa,
South America, and Western Asia. The list of countries was compiled with assistance from the
regional coordinators to identify countries that have used and/or tested the software suite. These
included twenty-three countries from Asia, ten from Africa, six from South America, and eleven
countries from Western Asia. Out of these fifty countries, responses were received from twenty-
eight countries, eleven from Asia, eight from Africa, two from South America, and seven from
Western Asia.

The questionnaire included six sections that covered software use, installation, training,
documentation, technical support, and use of alternative software. The results of the responses to
this questionnaire are summarized in the graphs below. As already mentioned earlier, unless
otherwise specified, figures in the charts indicate the number of answers under each category:
The countries also provided many recommendations, including the following:

1. The software should require lower hardware and software requirements.
2. Software tools should be integrated into few systems to facilitate use and mastering.
3. Software should allow for the archiving of micro data and indicators.
4. Software should be simpler, more user-friendly, faster and bug-free.
5. Software’s compatibility with existing operating systems should be enhanced.
6. Functions for intra-country comparison should be included, so that countries that are interested in comparing price levels among cities (regions) are provided with useful tools.
7. Training and testing should be given at least one year.
8. Software should be tested with live data and large databases before deployment.
9. Training individual countries or a small group of countries at a time is more effective than joint training.
10. Training courses should be organized in such a way as to have countries prepare their test data before and use this data during the training. The courses should be lengthier and should be conducted in two phases.
11. Software manuals should be more elaborate and provide more practical examples.
12. Including more case studies in software documentation may be helpful to illustrate operations better.

13. Manuals should reflect all changes introduced to the software.

14. Software manuals should be translated professionally.

15. Manuals should be available in each country's official language, if possible.

16. Prepare and post FAQs on the website.

17. Setting up regional technical support hubs or technical support teams for each group of countries (five to ten countries).

18. For convenience purpose, provide countries with the corresponding contact for technical support issues.

19. Re-branding the software suite under a different name than the Tool Pack.

Finally, the importance of retaining the staff trained on the software tools throughout the duration of the round was stressed. One regional coordinator and one country indicated that failure to retain the staff trained on the ICP Software Tools caused problems in their utilization.

Requirements for ICP 2011

Based on the results of the evaluation questionnaires and findings from the internal interviews, a list of requirements for the 2011 Software Suite was formulated. These include:

1. Design: The software suite needs to be modular, simple, user friendly, fast, easy to install, preferably without administration rights, requiring lower hardware and software requirements, and bug-free.

2. Database and archiving requirements: The Software Suite should allow for the archiving of various versions of the raw and validated data, as well as the metadata.

3. Timeliness and Cost effectiveness: The software suite should be completed, tested, translated, and finalized before countries start data collection in 2011. Where possible, it should build on the current existing tools at the World Bank and Regional Offices to save on the development, testing and documentation time.

4. Testing: Software should be thoroughly tested with live data and large databases, and used in pilot survey in 2010 to detect any remaining bugs. Regions and training centers can help in testing this software.

5. Documentation: Detailed instructions and manuals should be produced. System developers usually provide the technical manuals and the ICP Global Office can provide the ICP documentation.

6. Translation: The Software needs to be designed in such a way as to minimize translation. Only country modules need to be translated, and documentation needs to be translated professionally.

7. Training: An efficient training strategy should be in place, preferably including an accompanying electronic training tool to limit the cost of training.

8. Technical support: An efficient technical support strategy in place, preferably with regional support hubs in place.
These requirements can be further depicted in the three matrices below:

<table>
<thead>
<tr>
<th>Basic Requirements Matrix</th>
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<tbody>
<tr>
<td><strong>Time</strong></td>
</tr>
<tr>
<td>Planning</td>
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<tr>
<td></td>
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<tr>
<td>Design</td>
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<td></td>
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<tr>
<td>Development</td>
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<td></td>
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<tr>
<td>Utilization</td>
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</tbody>
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ICP 2011 Timetable considerations

A suggested required overall timetable for the development and deployment of the software suite in the 2011 round was developed. It is depicted below:

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<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aug</td>
<td>Sept</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
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<tr>
<td>Testing and documentation</td>
<td></td>
<td></td>
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<tr>
<td>Translation and testing</td>
<td></td>
<td></td>
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<tr>
<td>Testing in pilot data collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deployment of final product</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This timetable is tight and these overall deadlines need to be respected. More detailed steps and intermediary milestones and deadlines should be developed. This timetable need to be an important factor in deciding what can be realistically achievable for the 2011 round in the area of software development.