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New York, 21 - 30 August 2007
Item 9 (a) of the provisional agenda*
National standardization:
Field collection of names

Geographical Names in the Kingdom of Saudi Arabia
Field names collection procedure

Submitted by Saudi Arabia**

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** Prepared by the Production Department, Names Section, Saudi Arabia.
Geographical Names In the Kingdom of Saudi Arabia

Field Names Collection Procedure

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1. DESCRIPTION
The Names Collection Field Surveyors are verifying & updating the existing names on the old 50k maps and collecting new names by conducting interviews with local individuals and local & regional names authorities. They are also recording the names on tape recorder during interviews in order to keep the original pronunciation as it is. The surveyors are using pen tablet computers attached with GPS for navigation as well as for recording the geographical coordinates of the names. They are also marking the names extents, area limits on the field paper map. They are using verified names list form for preparing names list that need to be authorized by Imarah (Principality) office or any other local govt. officials.

2. PROCEDURE
The field procedure consists of three steps.

2.1. Pre-Field Preparation
The pre-field preparation is an important phase of fieldwork, office preparation can reduce the amount of time spent and cost in the field. The following things need to be prepared for fieldwork:
- Formal approval letter for fieldwork
- Collect 50k, 250k maps & satellite images that cover the area as a reference. Also, scanning the maps in *.jpg format & georeferenced them to use them as a background map in field computer.
- Complete the verified names list form according to old map sheet.
- Navigation paper map
- Tape recorder for recording names during interviews & meetings
- Pen tablet computer attached with GPS for navigation
- Digital Camera for to making pictures for names features
- Logistic support
- Field names collection Instructions for field surveyors guidance

Production Department
Names Section
2.2. **Field Operation**

2.2.1. Initial contact

Firstly the field surveyor should contact the local Imarah (Principality) Office and show them the fieldwork formal approval letter prior starting the field work. The surveyor gets some individual information who knows the area names very well from local officials.

2.2.2. Fieldwork

Before conducting the field work, the surveyor should interview some local individuals, who know the local names and select one as a guidance for field work. The surveyor using the Trimble TerraSync software with pen tablet computer which is attached with GPS for navigation and collection of geographical names coordinates. Scanned georeferenced *.jpg maps & satellite images are used as a background map in TerraSync software for navigation. In field the surveyor verifying the existing names on the old maps by interviewing the local individuals who know the names very well like teachers, old man and updating them. Also collecting new geographical names by interviewing the local individuals. Furthermore, the following information are collected during the field work

- Interview the local peoples and record the names on tape recorder.
- Mark the names location and its extents on field navigation map as well as in field computer digitally.
- Write the names on Names verified list form.
- Make digital pictures of geographical entities.

Surveyors working in Field

![Surveyors working in Field](image1)

Pictures with names

![Pictures with names](image2)

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Names Section
2.2.3. Field Office Work

After the field work, the surveyor should record the geographical names on a base map outline and mark its extents and show area limits on it. The names are classified according to their nature and colored accordingly.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Feature Category</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN</td>
<td>Area Name</td>
<td>Black</td>
</tr>
<tr>
<td>CN</td>
<td>Cultivated Name</td>
<td>Orange</td>
</tr>
<tr>
<td>DN</td>
<td>Drainage Name</td>
<td>Blue</td>
</tr>
<tr>
<td>PP</td>
<td>Built-up Name</td>
<td>Red</td>
</tr>
<tr>
<td>RN</td>
<td>Relief Name</td>
<td>Brown</td>
</tr>
<tr>
<td>CL</td>
<td>Cultivation Name</td>
<td>Green</td>
</tr>
<tr>
<td>DT</td>
<td>Descriptive Text</td>
<td>Not mark on overlay</td>
</tr>
</tbody>
</table>

Table No. 1

After completing the field work the surveyor verifies the Names list form from the Imarah office or Local govt. officials.
2.3. Post Field Work

2.3.1. Geographical Names Transliteration

After the field work, the Geographical Names Version 1.1.5 home built-in software is used to translate the collected Arabic names into Latin names. The software produced a list of names in Arabic and Latin sheet wise. All the field records which includes the Verified Names List, Latin Names List (.NMS file), Names Collection Field Plot & Names selection Overlay are submitted to DMP.

Geographical Names Transliteration software interface

<table>
<thead>
<tr>
<th>رقم اسم</th>
<th>اسم العربي</th>
<th>اسم الليثني</th>
<th>حجم النص</th>
<th>نوع النص</th>
<th>المصدر</th>
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<tbody>
<tr>
<td>1</td>
<td>Al Asharā</td>
<td>A1</td>
<td>DN</td>
<td>12</td>
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<tr>
<td>2</td>
<td>عمو الفيل</td>
<td>A1</td>
<td>RN</td>
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<td>printed</td>
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<tr>
<td>3</td>
<td>Sabkhat Māqta al Hijāj</td>
<td>A1</td>
<td>DN</td>
<td>12</td>
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</tr>
<tr>
<td>4</td>
<td>Sabkhat Rumādān</td>
<td>A1</td>
<td>DN</td>
<td>12</td>
<td>printed</td>
</tr>
<tr>
<td>5</td>
<td>Al 'Uyun 22 K.M</td>
<td>A1</td>
<td>DT</td>
<td>12</td>
<td>printed</td>
</tr>
<tr>
<td>6</td>
<td>Poultry Farm</td>
<td>A1</td>
<td>CL</td>
<td>12</td>
<td>field coll</td>
</tr>
<tr>
<td>7</td>
<td>بورصة دجاج</td>
<td>A1</td>
<td>CL</td>
<td>12</td>
<td>field coll</td>
</tr>
<tr>
<td>8</td>
<td>مسجد نعمة أم الله</td>
<td>A1</td>
<td>DN</td>
<td>12</td>
<td>printed</td>
</tr>
<tr>
<td>9</td>
<td>Quwayrāt Şufayyān</td>
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<td>RN</td>
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<tr>
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<td>DN</td>
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</tr>
<tr>
<td>11</td>
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<td>DN</td>
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<td>Al 'Uqayr 28 K.M</td>
<td>A3</td>
<td>DT</td>
<td>12</td>
<td>printed</td>
</tr>
<tr>
<td>13</td>
<td>مرعي نفاث</td>
<td>B1</td>
<td>CN</td>
<td>12</td>
<td>field coll</td>
</tr>
</tbody>
</table>
3. GEOGRAPHICAL NAMES DATABASE EXPLORER

The CNE is an application which allows a user to explore the Cartographic Names Database (CNDB). The CNE provides a number of different tools, for all levels of users, to aid in the search and reporting on Cartographic Names and associated meta-data.

**Main Feature of this application**

**Quick Explorer**: use the Quick Explorer to rapidly find a name in the database. This tool has been pre-programmed to show either Cartographic or Demographic details for the retrieved name.
With the help of quick explorer you can search name by writing the name of any city like "الرياض" and it will give the translated English name, feature category and coordinates etc. If you click the map icon as shown in Quick Explorer window, it will display the map of the city.

**Cartographic Names Query**: Performing a query on a Cartographic Name based on a user-defined set of input criteria such as by map sheet, by province, or by feature category can be made. Cartographic Names Query have four different types of data query tab.

**Spatial Query tab**

**Contents tab**

**Sorting tab**

**Demographics Query**: A powerful demographics search engine allows a user to perform queries on population statistics such as 'Number of Population > 250,000'. In addition, searches can be made to identify School and Housing statistics.

**Expert Explorer**: Advanced users may not find custom query they require and can use the Expert Explorer to perform a specific search.

**Demographics Query window**
**Reporting**: The output from any of the above queries can be simply reviewed on screen. For further analysis the output can also be viewed on to Microsoft Excel or MicroStation formats.

**Geographic Explorer**: Interactive map browsing and search tool which allows map feature to be rapidly located and viewed. The Geographic Explorer displays both a regional location map and a detailed map window.

![Geographic Explorer Image]

**Glossary Explorer**: This tool is conducted to find the description of terms used to describe Geographic Features. The Glossary Explorer includes a description of each term and an example photograph of the Geographic Feature.

![Glossary Explorer Image]

**Note**: For more details about the Geographical Names Transliteration software & Geographical Names Database Explorer contact our team attending the conference.