Multi scale vs. Discrete scale

Breakout session 1
## Multi scale (webbased) vs. discrete

<table>
<thead>
<tr>
<th>Webbased scales</th>
<th>Discrete scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:659</td>
<td>10K</td>
</tr>
<tr>
<td>1:1,300</td>
<td>25K</td>
</tr>
<tr>
<td>1:2,600</td>
<td>50K</td>
</tr>
<tr>
<td>5K</td>
<td>100K</td>
</tr>
<tr>
<td>10K</td>
<td>250K</td>
</tr>
<tr>
<td>21K</td>
<td>500K</td>
</tr>
<tr>
<td>42K</td>
<td>1M</td>
</tr>
<tr>
<td>84K</td>
<td>2M</td>
</tr>
<tr>
<td>169K</td>
<td>...</td>
</tr>
<tr>
<td>337K</td>
<td></td>
</tr>
<tr>
<td>674K</td>
<td></td>
</tr>
<tr>
<td>1,3M</td>
<td></td>
</tr>
</tbody>
</table>
Scale?

• Different levels of detail
• Different levels of abstraction
• Multiple resolutions
• Different scales for individual themes
• Natural aggregate levels instead of scale (Building, building block, neighbourhood, city, ...)

![Balance Scale](image)
‘Discrete scales will disappear in 5 years’

• No, webbased scales will disappear. In 2 years
• Modern users are not interested in scale but in speed and usability
• There will always be a (user) requirement for a discrete scale
• Preprocessing fixed scales will stay necessary
• On-the-fly generalisation / scale appropriate representation / dynamic representation is not fast enough for the user
• Fixed discrete scales are needed to provide a common, familiar and recognizable reference for discussion between areas of expertise
• The concept of scale changes, as will the way of cartographic thinking
‘Webbased is 10% of the costs as opposed to discrete maps’

• This probably only counts for the Netherlands
• The majority of the cost is not in generalisation but in data acquisition
• The cost of ownership of source data shifts to local authorities
• Only one database needs updating for webbased
• The generalisation process for webbased is less intensive than for discrete levels
Discussion

• How to define the right symbol if the scale is unknown?
• Printing on a certain scale might discard content
• Current discrete scales are chosen for a reason, they are fit for purpose
• If no displacement takes place problems with consistency might occur as objects are omitted.
Future of the concept of scale

• People zoom in and out and create their own scale based on usage
• Theme based datasets with a possibility of mixing different levels of detail based on user needs
• One database providing all necessary levels of abstraction