The power of mapping

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GIS and Audits
- Knowledge state
- Audit workflow
- Open questions

Example: GIS in use
- Preparation
- Field
- Reporting

Project next steps
- Survey
- Outputs
- Field tests
GIS knowledge
Are you

- Assessor
- Auditor
- Researcher
- Manager/Director
- Others

0
What does GIS stands for?

<table>
<thead>
<tr>
<th>Geography Services</th>
<th>Georeferenced Information Software</th>
<th>Geographical Information Systems</th>
<th>Georeferenced International Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>×</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>
What type of data can you collect with GIS?

- Areas/Polygons: X
- Dates: X
- Quantities: X
- Coordinates: X
- Codes: X
- All of them: ✔️
Remote sensing

None of the options are correct!

Option 1  Option 2  Option 3
Which one is not a valid projection type?

- Mercator
- Magellan
- Stereographic
- Eckert VI
- Lambert conformal conic

Correct answer: Magellan
Which of these data structures can't hold spatial data

- Raster
- Vector
- Polygon
- Option 4

The options marked with red crosses are Raster, Vector, and Polygon, which are not suitable for holding spatial data. The green checkmark indicates that Option 4 cannot hold spatial data.
Rate your experience with GIS

- 0: I barely have Google Maps on my phone
- 0: I had a GIS class some years ago
- 0: I occasionally use basic GIS functions
- 0: I'm a frequent user of GIS apps and functions

Are you

- Others
- Manager/Director
- Researcher
- Auditor
- Assessor
What do you like/dislike about GIS?
Do you think you are exploiting the potential of GIS in your work?

Not at all  
Partially  
Yes
<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>To meet SO requirements</td>
<td>0</td>
</tr>
<tr>
<td>To meet CAB requirements</td>
<td>0</td>
</tr>
<tr>
<td>Objective data gathering</td>
<td>0</td>
</tr>
<tr>
<td>Improve understanding of the situation</td>
<td>0</td>
</tr>
<tr>
<td>Compare data over time</td>
<td>0</td>
</tr>
<tr>
<td>Other reasons</td>
<td>0</td>
</tr>
<tr>
<td>No need to use it at all</td>
<td>0</td>
</tr>
</tbody>
</table>
What are your limitations?
Why GIS?

“There is this story about the auditor who was always taken to the same spot every year, only the date and code on the location’s information sign was replaced”

GIS dilemma

So many tools...

- Where do I start?
- What functions do I need?
- When and how do I apply them?
Some of the available tools

Which criteria should be considered when choosing a tool?
Criteria:

- Applicability (data collection, processing, display)
- Costs (free of charge, unique or regular payment)
- Owner (open source, private company, public)
- Op. Sys. compatibility (Windows, Mac, Android, iOS)
- Experience (was it applied in audits?)
- User-friendliness (tool itself, but also ease of export function)
- Available support (tutorials, Q&A, documentation)
- Tool must be able to convert projection (called “on-the-fly”)
- Time of existence (i.e. being maintained and updated?)
- Stability (in terms of running the tool and also in terms of cost)
- Compatibility between tools (e.g. transferal of data)
What main criteria should be considered to choose a tool?
What other criteria would you consider?
1. Planning the audit

- How do you plan the audit?
  - Do you look for the CH location? How?
  - Do you explore the location remotely? How?
  - Do you get information from external sources? Which ones?
  - What material do you prepare or take with you?

2. Conducting the audit

- How do you conduct the audit?
  - Do you look/ask for locations? How?
  - Do you register the locations you have visited? How?
  - How do you record non-conformities?
  - What other material do you generate while on-site?

3. Audit follow-up

- How do you do the report?
  - Do you have a system?
  - Do you measure improvements/changes over time?
  - What is specially hard to accomplish in time?
  - What kind of evidence do you use?
**Computer**
- Drawing polygons, lines, buffer, clipping, creating layers, intersection, measuring, creating and displaying maps, etc.

**Compatibility**
- Mini database, data exchange, exporting / importing, html, adding videos, organizing data, etc.

**App**
- tracking, routing, finding areas, taking points, pictures, notes, exporting/importing, etc.
How important are/may be the following functions in audits:

- Route tracker
- Creating maps
- Overlapping layers
- Visualizing satellite data
- Point finding
- Taking geo-referenced pictures
What other functions may be important?
Should ASI assessors use GIS ...

Are you

- Others
- Manager/Director
- Researcher
- Auditor
- Assessor

0 Systematically 0 On a case by case basis
Rate the effort vs the impact of implementing new functions

1. Mobile applications
2. Satellite data use
3. Remote audits
4. Evidence saving
Manual

Getting people started
Pointing to existing resources and data
Giving advice
Being agnostic
Outlining a GIS workflow for audits

Exchange

Survey "GIS tools and invitation to collaborate" (https://goo.gl/forms/28caZ44ppi6b439v1)
E-learning in your own speed at your own time
LinkedIn for sharing experience, raising issues, discussing „GIS tools in auditing“

Field tests

Russia (FSC)
12-16 June
Malaysia (RSPO)
9-12 July
Holland/Vietnam (ASC)
TBA

Join us!
Questions?

0 questions
0 upvotes
If you want to do the survey, participate in the field test, or collaborate in the outputs contact us.

Thank you!

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Locate the CH

- As a point
- As the production area

Check surroundings

- Features of a picture
- Overlapping with delimitations
- Check changes in time

Preparation

- List important point or areas to visit
- Create a route
What do we aim to do?

Discuss the different steps of an audit
Check if and how GIS can add value
Apply GIS in practice
Define takeaways
Inform manual and e-learning assets

- For which programs?
- Which software or apps do you use?
- Are you a self-taught GIS user or has your CAB offered training?
- What do you hope to get out of this master class?