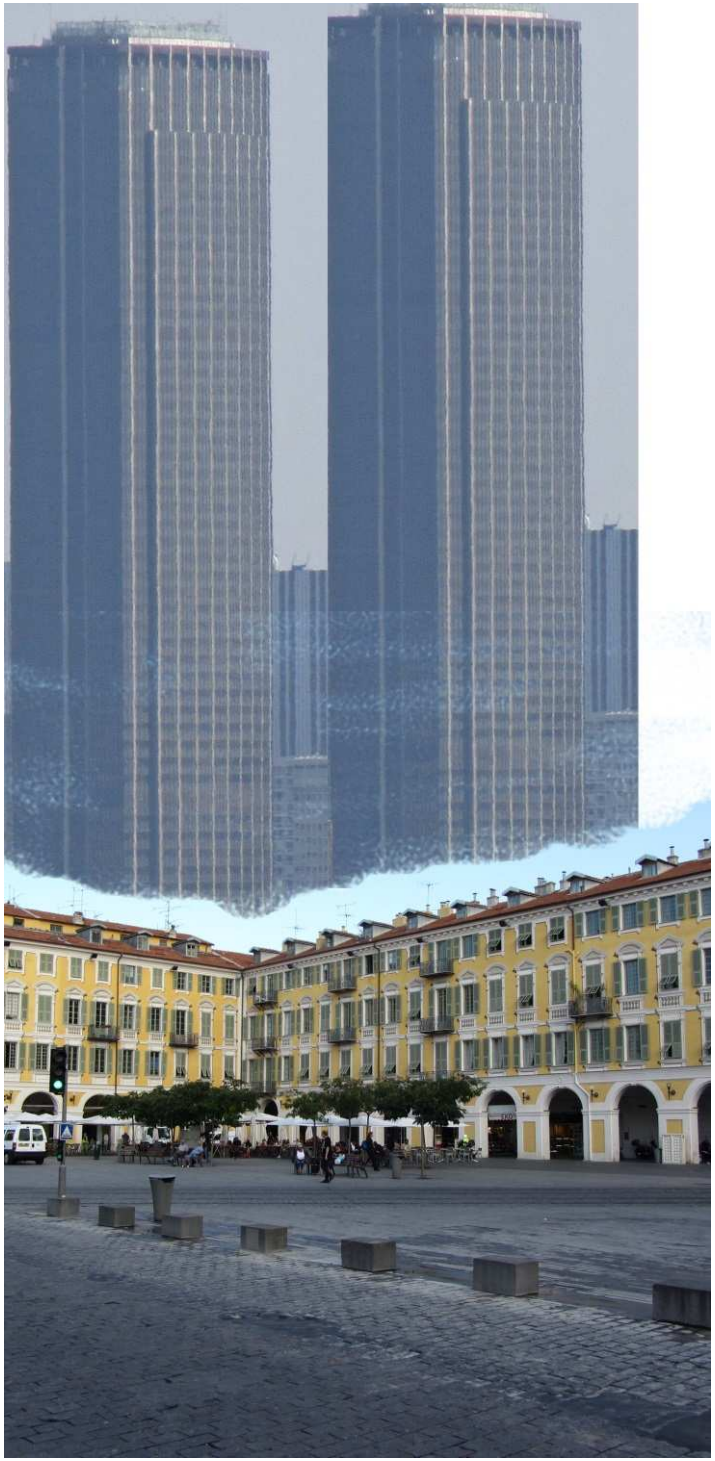


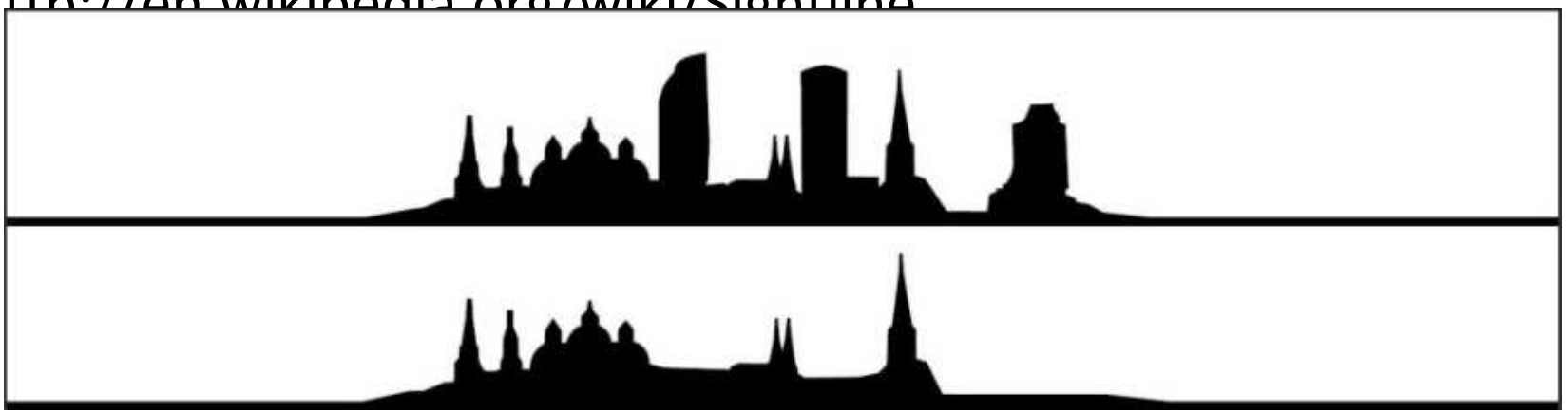
INTERNATIONAL CONFERENCE ON CONTEMPORARY ARCHITECTURE AND HISTORIC URBAN CONTEXT

Seville

sight line

- *"A **sightline**, **sight line** or **visual axis**, is a normally unobstructed line-of-sight between an intended observer (or spectator) and a stage, arena, or monument, for example. Sightlines are a particularly important consideration in theatre and stadium design, road junction layout and urban planning. In cities such as London, construction within sightlines is restricted to protect the key views of famous landmarks.[1] Objects that have a direct line of sight with one another are said to be **intervisible**."*

http://en.wikipedia.org/wiki/Sightline



- INDICATOR BASED MONITORING OF VISUAL INTEGRITY. -

International Conference on Contemporary Architecture in Historic Settings.

Seville.

The setting

The State parties are encouraged to consider integrity and authenticity of the **visual qualities of the attributes** and the relationships of the management of existing world heritage sites (art. 16). Agra Expert meeting on Visual Integrity, March 6-9 March 2013. http://whc.unesco.org/uploads/events/documents/event-992-18.pdf

1.The setting of a heritage structure, site or area is defined as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character.

Beyond the **physical and visual aspects**, the setting includes interaction with the natural environment; past or present social or spiritual practices, customs, traditional knowledge, use or activities and other forms of intangible cultural heritage aspects that created and form the space as well as the current and dynamic cultural, social and economic context. XI'AN DECLARATION ON THE CONSERVATION OF THE SETTING OF HERITAGE STRUCTURES, SITES AND AREAS. Adopted in Xi'an, China by the 15th General Assembly of ICOMOS on 21 October 2005 Final version - 22.10.2005. http://www.icomos.org/charters/xian-declaration.pdf

CONTENT

This paper will outline central elements in such a management (and monitoring) system. The paper will outline the methods relevant to indicator based monitoring visual-integrity.

2011 UNESCO's Recommendation.

- The Recommendation on the Historic Urban Landscape will not replace existing doctrines or conservation approaches it is an additional tool to integrate policies and practices …
- This tool, which is a **"soft-law"** to be implemented by Member States on a voluntary basis. facilitate implementation through formulation and adoption of supporting policies; and to monitor its impact on the conservation and management of historic cities.

Recommendation on the Historic Urban Landscape (10 November 2011 UNESCO's General Conference).
http://whc.unesco.org/en/activities/638

- *While the area should be clearly delimitated by border(line)s, the landscape has no limits, or its limits are ambulant: they follow the gaze of the observer.*

Historic Urban Landscape .A Conceptual Analysis by Gábor Sonkoly

Visual integrity indicators – Mandatory

- The State parties are encouraged to consider integrity and authenticity of the visual qualities of the attributes and the relationships of the management of existing world heritage sites (art. 16).
- And a mandatory assessment of Development proposals for negative visual impacts through damage to key views, viewpoints, panoramas and silhouettes should **be part of the legal system of the state party**. Agra Expert meeting on Visual Integrity, March 6-9 March 2013.

Sight lines from the mediaeval Oslo to the Akershus fortress


Akershus
Sørengautstikkeren
Munch
Operaen
Kongsbakken
Mariakirken

The sight lines between the medieval Oslo and the forteress. From Verdens Gang.

International meeting on visual integrity. March 2013.

- monitoring tools for the identification and protection of key **views, viewpoints and panoramas and silhouettes** should be included in the management systems and nominations, and should derive from the **Outstanding Universal Values** of each property (art. 18).
- assessment of visual qualities and impacts should be integrated in the planning process … be **part of the legal system** of the state party.
- to identify best and efficient practice available
- Revision of Operational Guidelines
- Agra Expert meeting on Visual Integrity, March 6-9 March 2013.

Management System Tools ’. HUL management system.


Fjellpryd
apotek
VE96306

Management System Tools. OUV.

- The OUV is an administrative tool and the starting point to derive operational variables for monitoring.
- The monitoring should focus on the condition (state of conservation) of OUV attributes.
- '*write the visual aspects into the OUV*'.
- incorporation of visual integrity in the administrative legal planning processes is critical for its use.
- The standardisation aspect is essential to secure compatible and comparable monitoring data input.
- A monitoring system should be kept simple and costs reasonable

OUV - DIVE method.

- *It [DIVE] emphasizes the conservation of the physical and spatial aspects within the development / transformation process of the city, while seeking sustainable development by transforming the cultural values of the city into assets that add value to all dimensions of the development process economic, political, social, cultural, environmental and spatial).*

- Dive as a tool. ISBN: 978-82-7574-057-9 (pdf). This English pdf edition is a shortened version of the Norwegian printed publication: *Kulturhistorisk stedsanalyse: En Veileder i bruk av DIVE*, ISBN 978-82-7574-047-0. Web based pdf, ISBN 978-82-7574-404-5. (Reference. Urban Heritage Analysis)

Monitoring 1.

- The OUV attributes, their features and elements are the basis for selecting variables. A selected number of these variables or groupings (aggregates) of variables constitute the indicators to monitor.
- A monitoring system should be kept simple and costs reasonable. The number of indicators are few. The monitoring should focus on the condition (state of conservation) of OUV attributes.
- The variables monitored are (operational) attributes and what is monitored for each object / site is its (physical) condition.
- Data collection should be effective (operationalisation of variables and of measurement).
- It should contain effective methods keep track of the selected critical indicators through standardised methods / procedures. Computer assistance.
- Must set tollerance levels and specify triggered actions.

Standards and Technology. Monitoring 2

- A dedicated visual-integrity standard could guide monitoring just as the CEN EN 16096:2012 Conservation of cultural property – Condition survey and report of built cultural heritage does for the classification of maintenance condition of the built heritage.
- Standardisation is essential for compatible and comparable data input. Standards are also important as they can prescribe a procedure to operationalize variables.
- Operationalisation is probably the most complicated part of the development process.
- New technologies and new media (satellite technology, sensors, computer assisted monitoring) have an important role.

Vilnius

Prague

Method - ICOMOS

- A method for developing operational condition indicators (for monitoring) based on the site OUV has been tested by ICOMOS.
- The monitoring should focus on the condition (state of conservation) of OUV attributes. The variables monitored are (operational) attributes and what is monitored for each object / site is its (physical) condition.
- The OUV attributes, their features and elements are the basis for selecting variables.
- A selected number of these variables or groupings (aggregates) of variables constitute the indicators to monitor.

- *"A Methodological Approach to Monitoring of WH Sites Based on OUV of Røros Mining Town and the Circumference."* In Outstanding Universal Value and Monitoring of World Heritage Properties. Ed. Prof. Boguslaw Smygin,. Published by: Polish National Committee of ICOMOS and National Heritage Board of Poland, Warsaw 2011. ISBN 978-83931656-3-6.

A Method

- From the **Criteria** for nomination and their relevancy for the site emerges a set of attributes.
- The **Attributes** are the most encompassing and widest descriptors differentiating the qualities of the site.
- For each attribute a set of **Components** serve to describe important aspects or parts of the attribute.
- For each component a set of **Features and Elements** describe and define its qualities. The features and Elements are the lowest level descriptor variables used.

Method

- **Figure 1. The structure and relationship between descriptive terms used in the document.**
- OUV –→ Attribute --→ Component --→ Feature/Element.

Table 1. Attributes.

Note: In total there are 16 attributes declined from the OUV.

[1] Røros Mining Town and the Circumference. Norwegian nomination 2009 for extension of WHS Røros Mining Town. Norwegian Ministry of Environment. Oslo January 2009.

Attribute
1. Reflects the particular kind of industrial planning introduced by the Danish kings of Norway in the sixteenth and seventeenth centuries.
1. Characteristic example of this type of technological and industrial development,
1. A regular urban pattern adapted to the mountain terrain.
1. The totality of the urban complex and it's individual constituent parts.
1. The industrial buildings and the slagheaps created over the years.

Attribute	Component	Feature / Element
A.5 **Totality of the urban complex constituent parts.**	C.1 - 2.1 The landscape C.2- 2.2 Røros Mining Town C.3 - 2.3 The Smelting House and the Malmplassen square C.4 - 2.4 The Slagheaps C.5 - 2.5 The Church C.6 Flanderborg, C.7 Åsengården farm ** second number indicates the provenance chapter of the component	C.2 F.1 - 2.1.1The town plan 1711 C.2 F.2 - 2.2.1 Bergmannsgata street C.3 F.3 - 2.3.1 and it still functions as a center of activity and as a meeting-place C.1 F.4 - 2.4.1 into major features of the landscape. appear almost as they did during the time when the copper works were in operation. C.4 C.5 F.5 - 2.5. with 2.4 Together they dominate the townscape. C.5 F.6 Impressive edifice, with lime-washed masonry walls in late-Baroque style. visible from the entire town F.7 Flanderborg, more organic structure, lower classes F.8 The outbuildings and the farm Åsengård. ** second number indicates the provenance chapter of the descriptor.

Indicators of ‘a manageable’ monitoring system

- select a limited number of high value information variables as indicators for.
- Possible to construct new information variables by aggregating variables. Such aggregated variables are often needed to create good indicators.
- These information variables are symptomatic of the general condition and are high value information carriers.

Indicators - Monitoring

A system needs

- operational objectives,
- a unified (standardized) methodology,
- (operational) indicators,
- specifications of quantifiable units (what and how to measure),
- tolerance levels, mandatory consultations (communication / reporting) and ‘decision-making ‘triggers’’ (prescribed actions and implementation procedures), intervals, responsibility and reporting.
- UNESCO also wishes the system to defined approaches and **actions to** appreciate and **measures** to prevent or remedy decay, loss of significance or trivialisation. It should propose improvement in conservation, management and interpretation practices. (someplace else?).

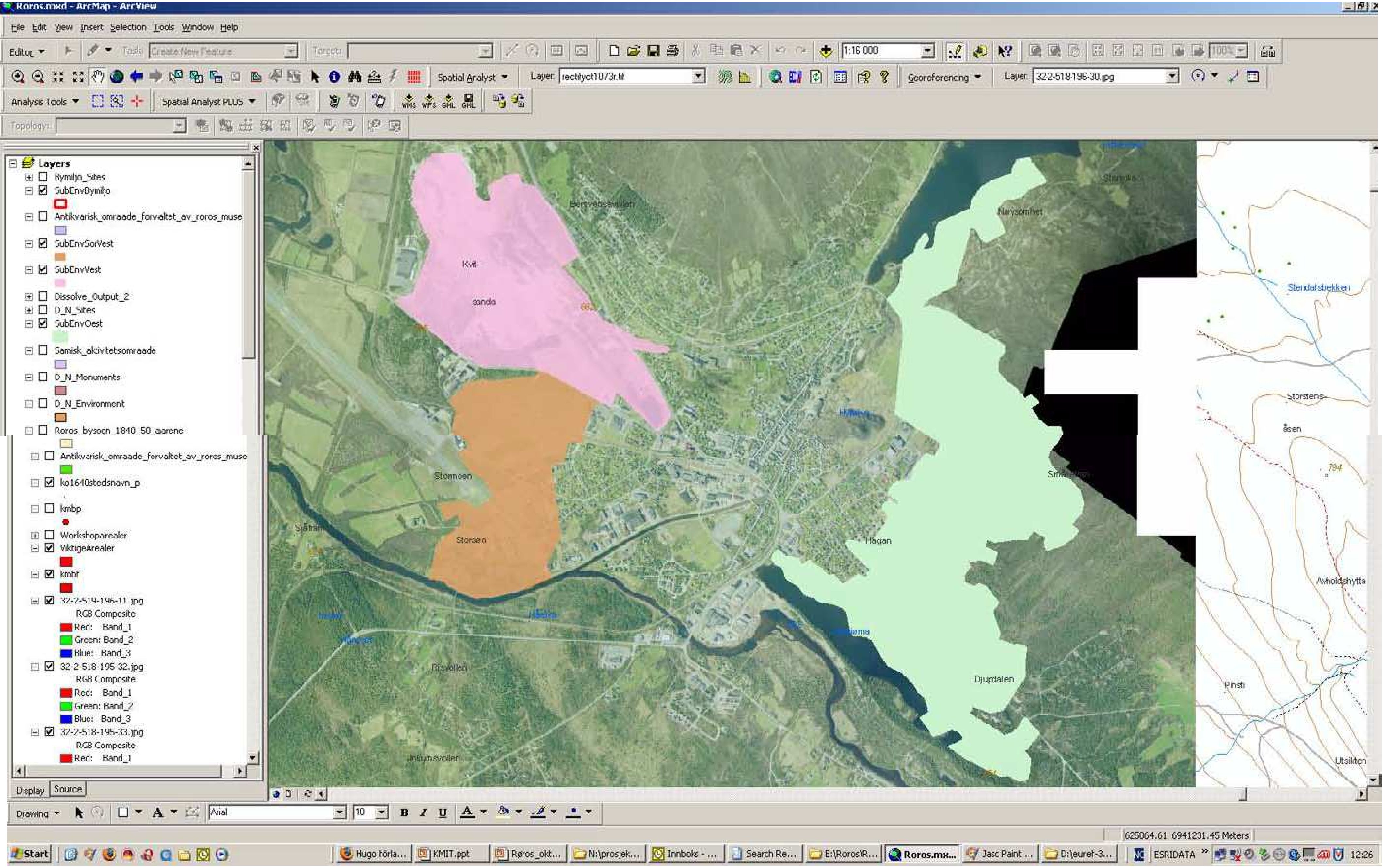
Indicators – Operationalising.

After identifying or constructing meaningful indicators these need to be go through a procedure to secure their operationalization, to create standard scoring or measurement procedures for statistical quantification. This is often the most difficult part!

- specify the different measurements to be reported.
- What is the unit? What is the scale?
  - total sq. meters or number of buildings / objects?
  - a grading scale like in CEN EN 16096:2012 Conservation of cultural property – Condition survey and report of built cultural heritage?
  - dichotomy such as ‘change’ or ‘no change’?

Pelli tower

Monitoring indicator	Comment.	Freq.	Responsible
1. Overgrowth of cultural landscapes:	Monitored through the analysis of aerial photographs. Comment: Should also be expressed as a %-tage increase in overgrowth relative to total area. Only visual assessment of change with no indication of a figure is not operational for time series. Need for further refinement.	Yr.	County, DCH
10.Construction of holiday homes	Monitored through the analysis of aerial photographs. Comment: Increase in absolute n. of such buildings in the area monitored. Should also be expressed as a %-tage increase in numbers relative to n. at the start of the monitoring programme.	Yr.	County DCH
11.Growth of urban settlements:	Monitored through the analysis of aerial photographs. Comment: Should be expressed as a number and as %-tage increase in the extended area relative to the historic area. Need for further refinement.	Yr.	County DCH
12 Visitors and visitor damage.	NS 3423 or CEN/TC 346 prEN 16096 addition of measure-ments / visual inspections done at defined locations. Comment: Visitor numbers should be included. Locations and parameters need to be defined. Need for further refinement. Specially measuring visual integrity	2 *	Yearly in course of season. ?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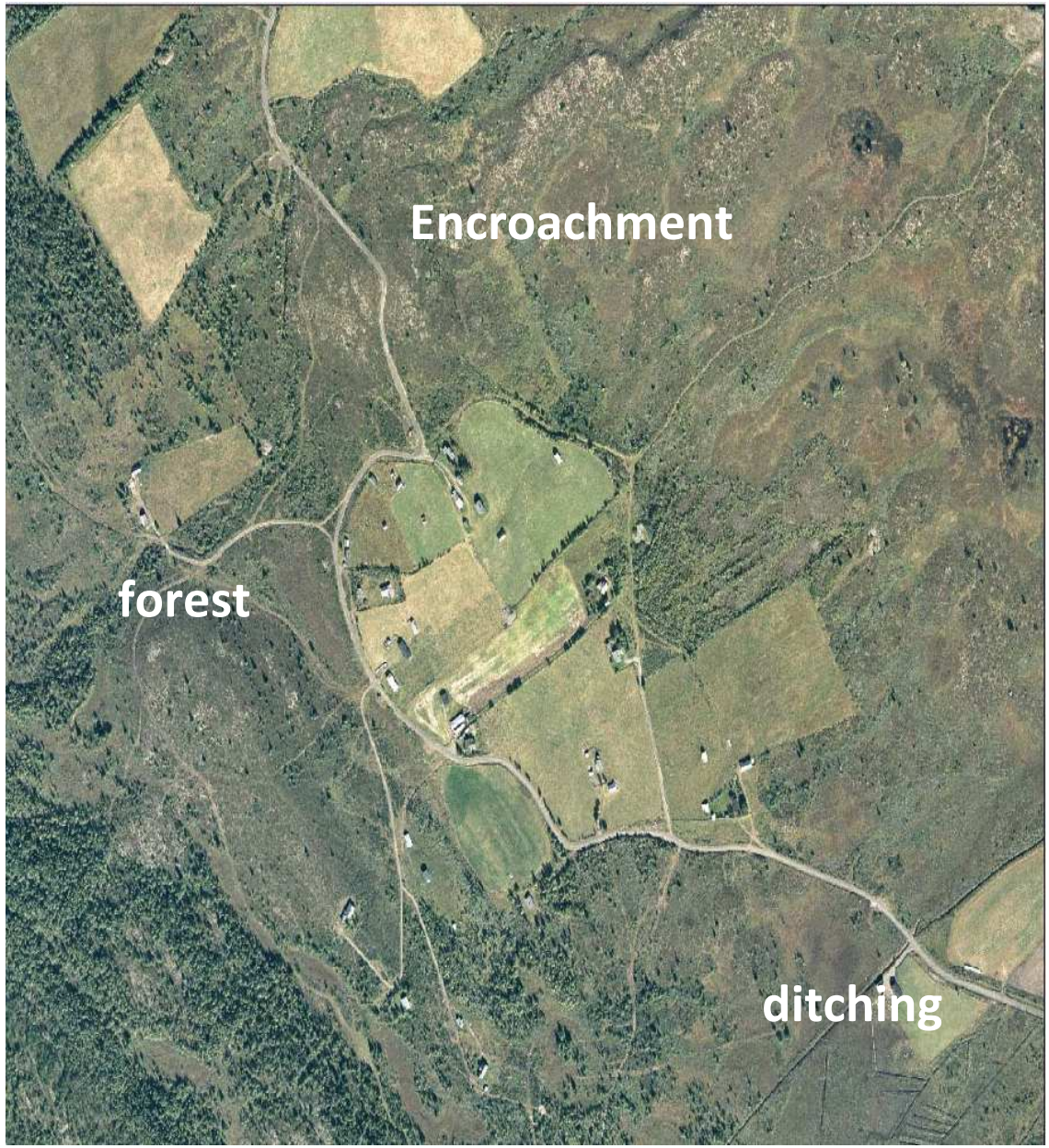
DEMOTEC

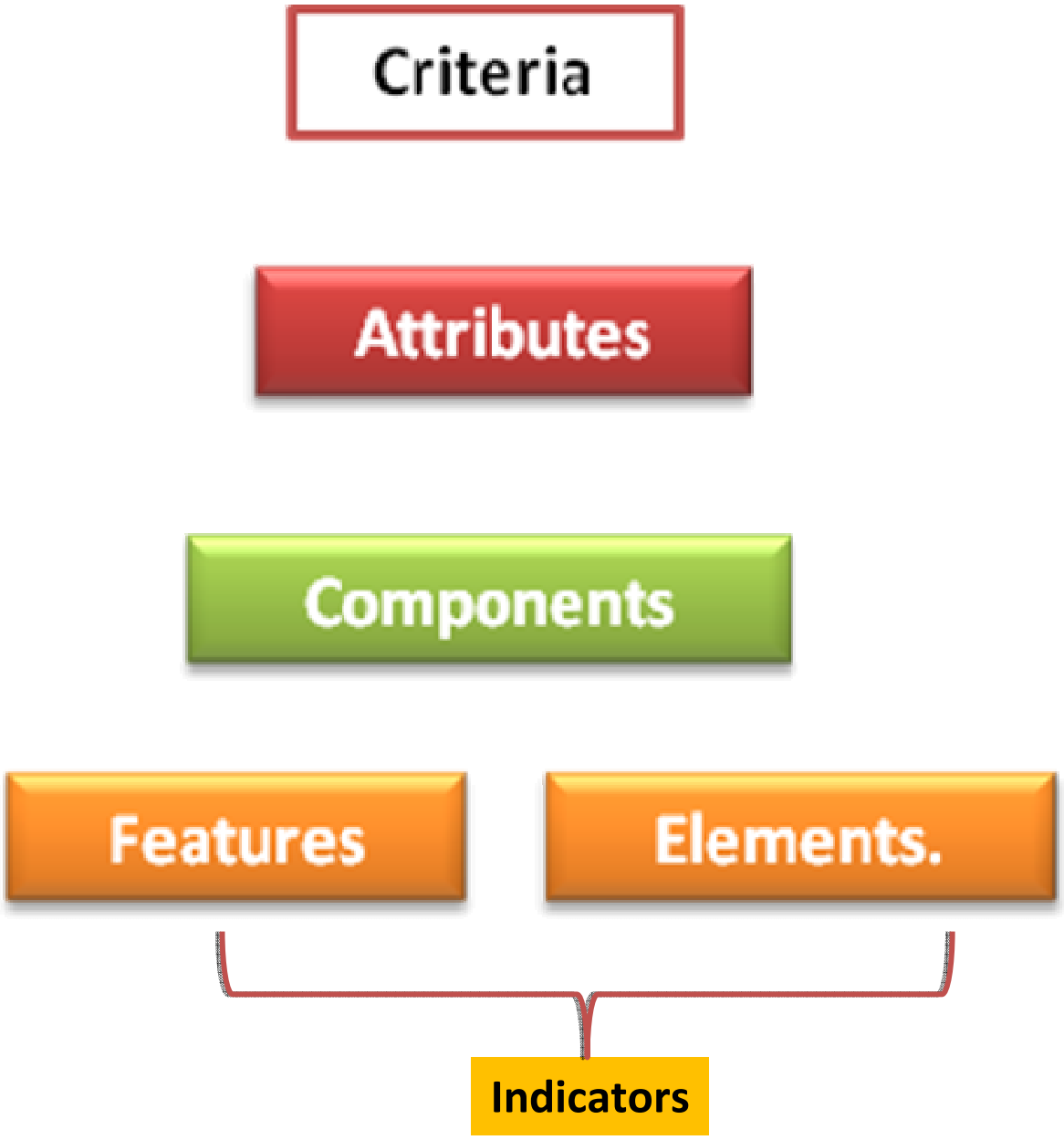


CHE scale: Change in landscape structure, landuse and - Cover.
Data: Rectified aerial photos 1965. Orthofoto 2000. Soil type maps. Chosen viewpoints (photos). Synthesized preservation status for cultural heritage based on Norwegian Standards for buildings and prehistoric monuments. Interviews
What is being measured?
e.g. Vegetation index. Cadastre structure. Land-use change
Road structure ,density of housing development. Preservation change for cultural heritage.

DEMOTEC – a Toolbox for Monitoring Cultural Heritage, some results and recommendations

- Some, not all countries have national preservation goals. Monitoring is the responsibility of the state authorities, but in some countries decentra.-lization to regional authorities often results in varying goals and **non-compatible methods.**
- **Few standards are implemented although the need is seen.**
- Introduce landscape or CHE scale to create overview, get ahead of the development situation, **create early warning system that are indicator-based .**
- A spatial approach to CH monitoring also creates a platform for collaboration between sectors, which will be important in order to establish systems for a wider environmental sustainability goal.
- An important aspect of monitoring is the potential *to identify problems before they are too widespread –i.e.* ***early warning systems****.*

- **CONTRACT NO:** EVK4 –CT-2002-80011 **Contract type:** Accompanying Measure. **Scientific officer**: Michel Chapuis

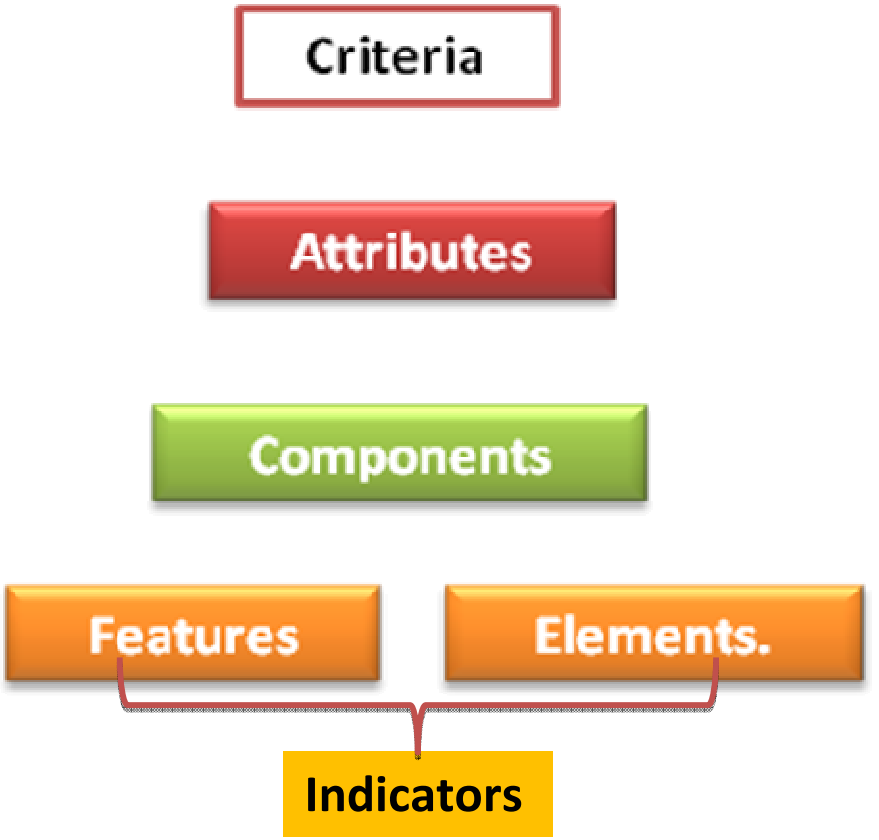


OUV BASED MODEL ?

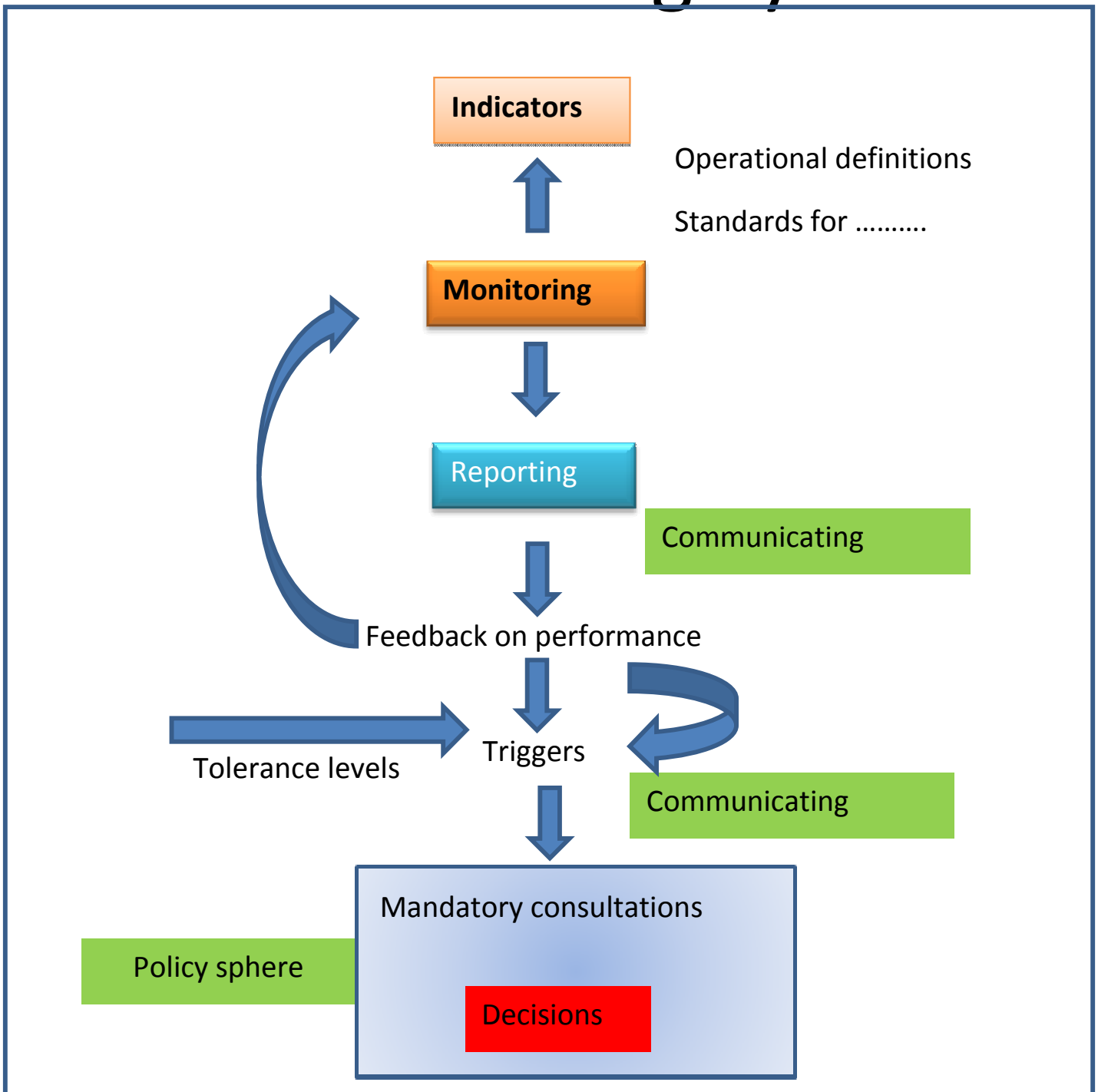
Tolerance levels

Monitoring

Feedback on performance


Criteria
Attributes
Components
Features
Elements.
Indicators
Tolerance levels
Monitoring
Feedback on performance

Full Monitoring System



Summarising

- Develop indicators, operationalise them (!), monitor them. Learn from experience! Use the method.
- Monitoring and indicator development demands some sort of standardisation … to assure a shared methodological approach for the tasks at hand. In CH management the use of the Standardisation institute is new, but increasing in use.
- Computer assisted monitoring, mapping and digital change identification (of for example photographs) allow advanced monitoring at reasonable costs. Precondition is a well-designed (and standardised) monitoring of operational indicators.
- Integration on the regulatory side critical for effect; use of the (EU) EIA regulations (Environmental Impact Assessment), and be part of planning processes.
- Engage with the trans-national production of regulations in the EU and beyond, as these supersede national regulations. Achieved great improvements in the EIA regulations for cultural heritage.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E N D